Chapter 7

CSS Operations

CSS SUPPORT STRUCTURE

7-1. The DISCOM is a multi-functional organization capable of providing, coordinating, and synchronizing logistical support to the division. The DISCOM's mission of sustaining the division's combat power is more critical than ever. The DISCOM consists of FSBs, a DSB, a DASB, and the HHC. The DISCOM provides CSS for the division. It provides arming through its Class V operations, fueling through Class III operations, fixing through its maintenance operations, transportation through the truck company in the DSB and the supply and transportation sections in the FSBs, and sustaining through the provision of rations, individual equipment, and medical support. The personnel sections throughout the division provide the manning function. This chapter will discuss the six tactical logistics functions throughout the DISCOM to give the DASB commander and battle staff an understanding of what and how CSS integrates from higher, DISCOM and EAD, laterally, with the DSB and FSB, and to the lower supported units. The DISCOM organization is shown in Figure 7-1. Shown in Figure 7-2 are the non-divisional CSS assets, their command and support relationship, and their location in the divisional battlespace.

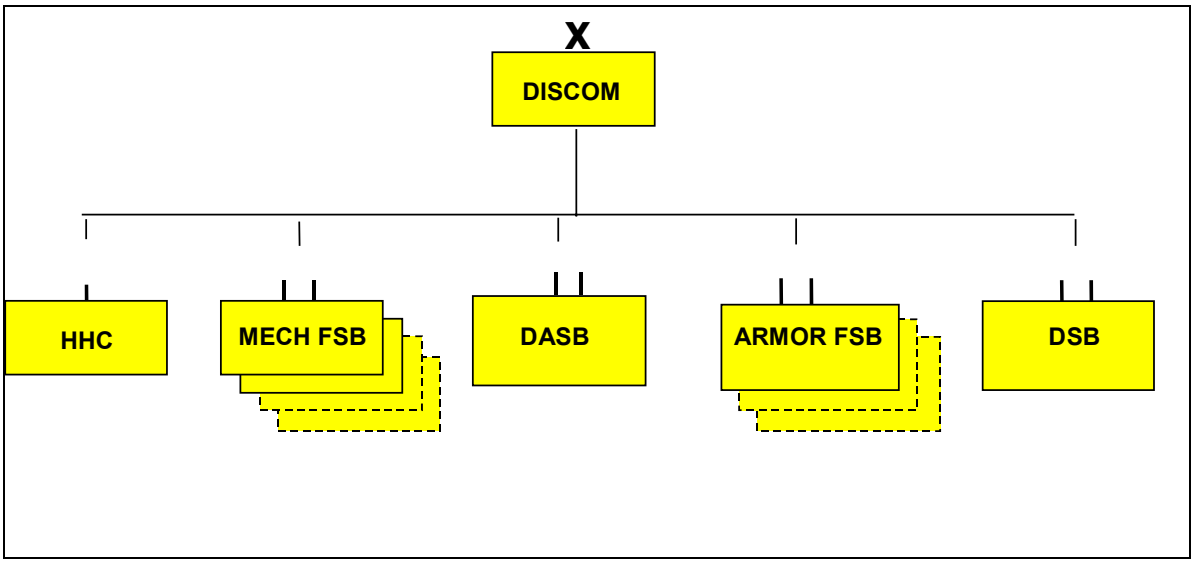

Figure 7-1. DISCOM Organization

Non-divisional CSS Inside FXXI Divisional Battlespace

(METT-TC)

Command and Support Relationships May Vary Based on METT-TC, as well as Availability of EAD CSS Capability

In Support of the Division

*MST	+Air MEDEVAC
F&E Rpr	+Gnd Ambulance
Allied Trades	+FST
DS Reinf Trk&Whl	+Cbt Stress Ctrl Tm
	+ Contingency K Tm
*Wtr Purif Det/Tm	+AMC-LSE/LAO Tm
*ASP	+CA Tm
*MCT	
*MA Plt	
*Trk Co(PLS/POL)	

In Support of Corps Trps/Div Area Spt

Trailer Transfer Point	FDRP
TMDE/Cal Tm	EOD Det
PSB&Fin Bn elements	Field Svc Co

In Support of Corps Trps In Div Rear

*CSB HQ/HHC	*DS Supply Co
*DS/GS Mt Co	Perishable Sub Plt
Wh/Trk Veh Rpr	DS Ammo Co
Arm/FC Rpr	Trk Co(PLS/POL)
FA/ADA/Msl Rpr	MCT
Pwr Gen Rpr	MA Sect
Commel/F&E Rpr	
Allied Trades	+Area Spt Med Co
Recovery	+Air MEDEVAC
Comp/GS Reps	+Gnd Ambulance
	+FST

In Spt of the Div in Brigade Battlespace

*Commel Repair
*Wtr Purif Det/Tm
*MA Tm

+Air MEDEVAC Element
+Gnd Ambulance Element
+FST

In Spt of Corps Trps in Brigade Battlespace

*FLE FA Bde	*FLE Engr Bde
Log C2	Log C2
MST	MST
Supply	Supply
Trans	Trans

*Log Tsk Force ACR
Log C2
MST
Supply
Trans

+Air MEDEVAC Element
+Gnd Ambulance Element
+FST

Note: Med units denoted by + will likely be C2 by Med HQ; CA/AMC by their respective command

Figure 7-2. Non-divisional CSS Assets Inside FXXI Divisional Battlespace

ARMING THE FORCE

7-2. The division operates four ATPs. These are usually arrayed to support one maneuver brigade each and one to support the AB and division cavalry squadron. A DAO representative manages each ATP. In addition to the division ATPs, the corps DS ammunition company establishes an ATP which provides Class V support to both divisional and non-divisional troops in the division rear area. The corps DS ammunition company also operates an ASP to provide support to the ATPs in the division and as an alternative source of Class V to units not supported by an ATP. Both the ASP and rear ATP are corps assets.

UNIT LEVEL AMMUNITION STATUS REPORTING

7-3. Using the LOGSITREP, via FBCB2, unit ammunition on-hand status is reported per unit SOP to the 1SG, with information copies going to the company commander. The 1SG consolidates the unit's on hand quantities and forwards them via the LOGSITREP, via FBCB2, to the BN/TF S4, with information copies to the BN/TF commander and S3. Company commanders will indicate in their LOGSITREP remarks about any critical ammunition shortages or forecasted changes in ammunition requirements. At the discretion of the CO/TM commander cross leveling on-hand ammunition within platoons or throughout the company is accomplished.

DETERMINING/REQUESTING BATTALION AMMUNITION REQUIREMENTS

7-4. The BN/TF S4 will determine ammunition resupply requirements based on information provided in the LOGSITREP and guidance received from the battalion commander and S3. The BN/TF S4 will consolidate the entire battalion ammunition requirement. He will then submit the company roll up ammunition resupply to the brigade S4. The brigade S4 will consolidate the ammunition request and pass that request to the support operations officer located in the supporting DASB.

7-5. Units in the division rear submit their requests through the LOGSITREP/LOGSTAT to the support operations officer located in the DSB. The support operations officer for the FSB, DASB and DSB will request the ammunition support from the division ammunition officer (DAO) in the Class V section of the division support operations section. The DAO will compare the request with the controlled supply rate (CSR). If the request is within the limits of the CSR, the DAO will order the ammunition from corps either to be shipped directly to the FSC, or to replace stocks that will be issued from the ATPs located in the FSBs, DASB, or the rear ATP.

7-6. The ATP, operated by the HDC in the FSB, is responsible for supporting all units located in the brigade that are assigned, attached, have established a support relationship, or as directed by the DISCOM commander. The ATP in the DASB supports the AB and division cavalry squadron. The rear ATP, operated by corps, is

responsible for supporting all divisional and non-divisional units in the division rear.

7-7. The ATP is designed to provide the required lift and transload capability associated with high-volume and high tonnage. The support operations officer of the FSBs and DASB, in conjunction with the DAO NCO representative, will coordinate directly with those nonorganic units that will be supported by the ATP. The support operations officer/DAO representative will consolidate their ammunition requirements, and their request for resupply will be "rolled-up" with the brigade's request. Ammunition and explosives will be accounted for and provided proper physical security at all times.

AMMUNITION REQUEST VALIDATION

7-8. The DAO validates the brigade's ammunition requests by comparing the amount of ammunition requested against the CSR and the on-hand stocks in the FSB's ATP, DASB ATP, and the rear ATP. The DAO will take into account the current mission posture, scheduled/future mission posture, and operational guidance. Once all of these factors have been considered, the DAO will either validate the request or adjust it to meet the situation in coordination with the brigade S4 and supported units. The DAO will then determine, based on METT-TC and transportation availability, whether the ammunition resupply will be throughput to the DASB's ATP, or a forward rear point. Ammunition can be throughput to a cache (a storage location where corps transportation drops flatracks loaded with ammunition, the ammunition will be closer to the maneuver unit to reduce transit time) unless the tactical situation does not allow delivery that far forward. "Prep-fire" ammunition will be delivered as close to the batteries as possible to prevent the artillery ammunition carriers from having to up-load after the "prep-fire." The ammunition resupply requests and transportation requests are then sent to the corps materiel management center/corps movement control center (CMMC/CMCC), with information copies to the brigade DAO representatives, and the brigade and battalion S4s. The brigade DAO representatives will notify the HDC ATP (FSBs), HSC ATP (DASB), or rear ATP section (run by corps) of any scheduled ammunition deliveries.

AMMUNITION RESUPPLY

7-9. The CMMC, using SAAS-MOD and recommendations from the division support operations Class V section, determines whether the ammunition resupply will come from the ASP or the corps storage area (CSA). The DAO will use the CSSCS Class V-ATP's CS5-016 report to determine the ammunition status of the ATPs in the division. This information will determine if ammunition within the division can be cross-leveled to meet ammunition requirements. If the ammunition is coming from the ASP, the

CMMC cuts a materiel release order (MRO) directing the ammunition shipment. If the ammunition needs to be brought forward from the corps storage area (CSA), the CMMC will submit a request for ammunition resupply to the corps G4. Ammunition will arrive in theater in strategic configured loads (SCLs). The supporting activity, either the corps ASP in the division area or the CSA, will reconfigure the SCLs into mission configured loads (MCLs) prior to transportation asset arrival. The CMCC will schedule transportation IAW priorities. The ASP is then notified of where and when transportation will arrive by the CMCC. After ammunition has been loaded, the RF tags will be verified along with the correct cargo and destination. All ammunition shipments will be tracked through the MTS. Delivery coordinates and time will be sent by FBCB2 or CSSCS free text message to the receiving unit/activity, with information copies furnished to the DAO, brigade S4, DAO representative, the BN/TF S4, and respective FSB/DASB/DSB support operations. In the event an ammunition shipment needs to be diverted within the brigade, the brigade commander or designated representative will retain the sole authority to do so. This will be done through the DASB support operations officer using the CSSCS, MTS or FBCB2 through free text. Ammunition shipments that need be diverted within the division will be directed by the DISCOM commander or designated representative. See Figure 7-3 for Class V distribution within the DISCOM.

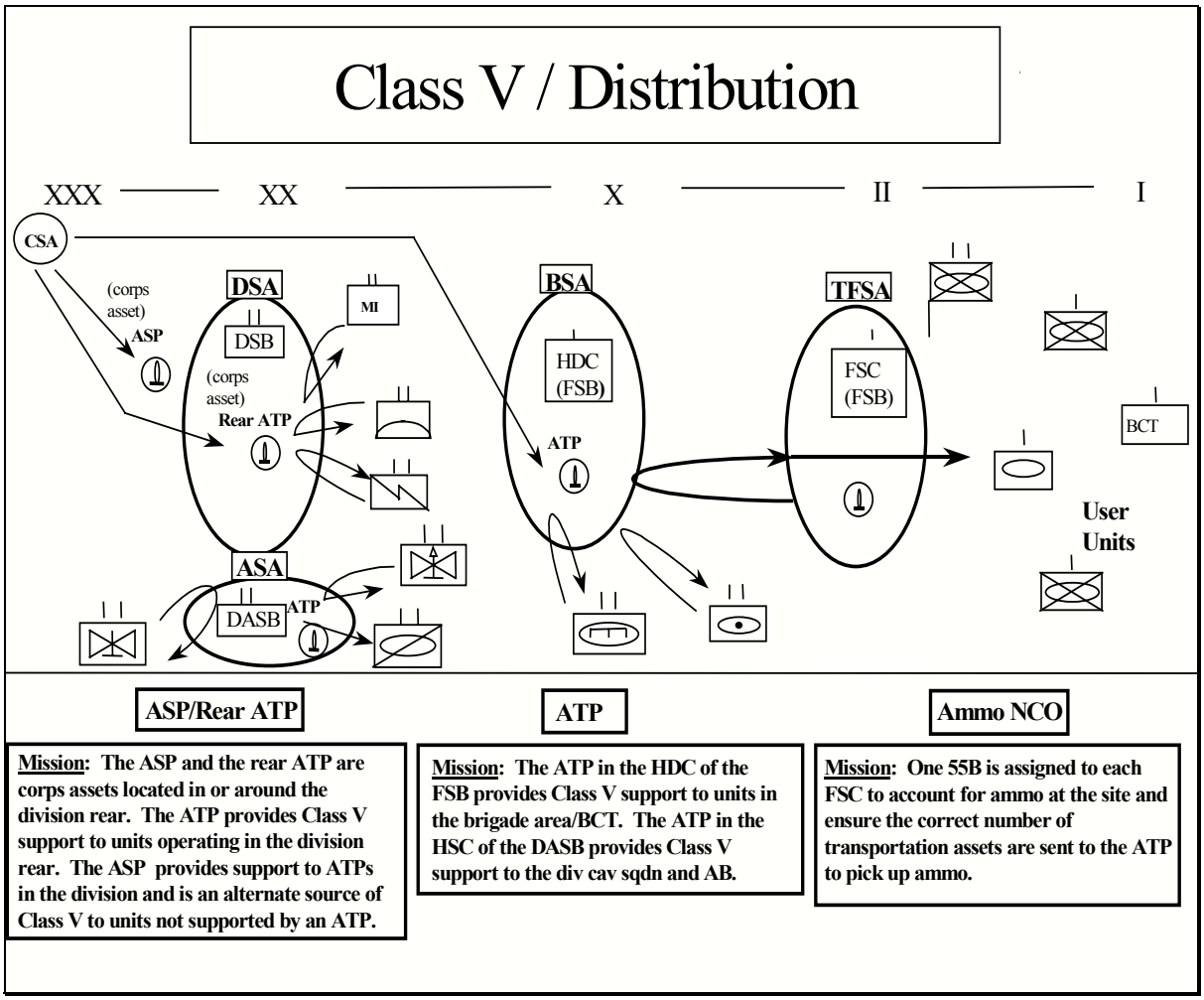

Figure 7-3. Class V Resupply

ATP OPERATIONS

7-10. The ATPs act mainly as a temporary distribution point, conveniently located to facilitate rapid issues to the users. The ATPs are operated by the HDCs (FSB) for the maneuver brigades and the HSC (DASB) for the aviation brigade and division cavalry squadron. The rear ATP, when utilized, is located vicinity of the DSA. It is established and operated by the corps DS ammunition company. The rear ATP is responsible for providing Class V support to divisional and non-divisional assets located in the division rear. One DAO representative will be located at each ATP. These DAO representatives will manage the issues of ammunition. The ATP will be used when forward deliveries are not required. Units that are directed to pickup ammunition from the ATP will follow the normal request procedures outlined above, and will also prepare a DA Form 581 to be sent to the DAO representative at the ATP. The requesting unit will submit the DA Form 581 through the BN/TF S4 who will approve the request and either forward it to the brigade S4, or have the unit hand carry it to the brigade S4 for approval. The DAO representative will confirm the request through the DAO prior to issue. If the unit has PLS, it will be directed to the appropriate “rack” to be picked up. If the unit requires “break bulk” issue, the ATP section will issue based upon the DA Form 3161 provided by the DAO representative. The DAO representative goes to the respective support operations section and uses CSSCS or MSE to coordinate and confirm. Coordination on the location, amount, and type of ammunition to be received at the ATP will be made among the DAO, CMCC, and the respective support operations officer based on guidance from the DISCOM commander, Division G4, and G3. Ammunition will be delivered on flat racks by corps transportation assets using PLS trucks and trailers. Ammunition transfer point personnel will interrogate RF tags of arriving PLS shipments to gain immediate visibility of the shipment and enable it to immediately identify the organization it is to be issued to. Units arrive at the ATP to pick up ammunition; drop off empty, or partially empty, ammunition flat racks and retrieve fully loaded flat racks. ATP personnel will assist units PLS in transloading ammunition. The ATP section will reconfigure loads to meet mission requirements on a limited basis only. The flat racks will normally be issued as shipped. If partially empty flat racks are returned and the returned ammunition is required within the brigade, the ATP section may consolidate the ammunition from the partially empty flat racks and make full loads for issue within the brigade. All empty flat racks will be shipped back to the ASP or CSA as soon as possible. The ATP representative will report all issues and turn-ins. Corps transportation assets used to deliver ammunition resupply will pick up the unit turn-ins to respective support operations and to the DAO. for immediate retrograde. When time and equipment permits, the ATP representative will attach RF tags to the retrograde shipments. The MTS will track the ammunition vehicle returns as they are retrograded to the rear.

The MTS provides the ability to redirect the shipment if needed. The ATP will maintain only those limited ammunition stocks that they can transport.

ASP OPERATIONS

7-11. The ASP is located in the vicinity of the DSA, but is non-organic to the division and is run by corps assets. The ASP is run by the corps DS ammunition company and provides support to the ATPs in the division and also serves as an alternative source of Class V to units not supported by an ATP.

FUELING THE FORCE

7-12. Bulk fuel, Class III(B) is handled by the corps petroleum distribution system, along with ½ DOS of reinforcing bulk fuel support to the FSBs and DASB handled by the fuel platoon of the quartermaster (QM) company in the DSB. The reinforcing fuel in the DSB provides capability for surge or pursuit and exploitation operations. This fuel is also a contingency reserve in case the EAD fuel is interdicted.

7-13. The Class III(P/B) and water supply branch of the general supplies section in the division support operations controls and manages the supply of bulk fuels to division elements. It determines fuel requirements and recommends priorities, allocations, and other controls for bulk fuels.

7-14. Fuel distribution will be a combination of unit distribution and supply point distribution. The fuel platoon of the QM company (DSB) will provide distribution of Class III(B) to the DSA, and reinforcing support to the FSBs and DASB. The distribution section of the supply and transportation platoon (HDC) is responsible for reinforcing distribution of Class III(B) to the BSA, and distribution to the HEMMT fuel tankers of the FSCs. The distribution section of the supply and transportation platoons (FSC) are responsible for distribution of Class III(B) to the supported BN/TF. The distribution section of the supply platoon of the HSC in the DASB is responsible for distribution of Class III(B) to the AB and division cavalry squadron.

7-15. Fuel status is initiated at the platoon or company level, and reported daily to the 1SG using the LOGSITREP report in FBCB2. Information copies will be furnished to commanders at each echelon. The 1SG consolidates on hand quantities and submits the fuel status report via FBCB2 to the BN/TF S4, with information copy to the FSC support operations section. The BN/TF S4 consolidates the fuel status report for the CO/TM and submits by company rollup on hand quantities via FBCB2 to the brigade S4, with information copy to the FSC support operations. The brigade S4 consolidates the BN/TFs and brigade troops fuel status reports and submits the report to the FSB support operations via FBCB2, with information copy to the division G4 via CSSCS. The FSC and HDC, using FBCB2, submits their bulk fuel status report to the FSB support operations section. The FSB support operations section consolidates the bulk fuel status reports for the brigade and slice elements, and submits it to the division support operations section

using CSSCS. Units supported by the DSB submit their bulk fuel status reports to the DSB support operations using LOGSITREP/LOGSTAT. The DSB support operations consolidates the bulk fuel status report for the division troops and submits it to the division support operations using CSSCS. The DASB support operations consolidates the bulk fuel status report for the AB and division cavalry squadron and submits it to the DISCOM support operations using CSSCS. The division support operations uses the bulk fuel status reports from the FSBs, DSB and DASB to compute the Class III(B) requirements for the division. The division support operations submits the consolidated division requirements to the corps support command (COSCOM) CMMC using CSSCS, with information copy to the division G4.

7-16. The COSCOM resupplies the division with bulk fuel twice daily based on METT-TC. It may be transported into the division by tanker, railway, or pipeline. A transportation medium truck company usually makes deliveries directly to the DSB, DASB and FSB units. The division support operations, with guidance from the division G4, will coordinate the bulk fuel distribution into the division. Throughput will be maximized down to the lowest level whenever practical. The preferred method of distribution is via LRP operations as coordinated with the DSB, DASB, and FSB support operations.

7-17. Bulk fuel will be issued based on priorities established by the division G4 with guidance from the division commander. The QM company of the DSB provides DS fuel to division troops and reinforcing support to the FSBs and DASB. The QM company provides supply point and unit distribution to the division troops, as determined by fuel consumption/distances/METT-TC. The DASB HSC provides bulk refueling to the AB and the division cavalry squadron. The FSB support operations is responsible for coordinating the resupply of bulk fuel to the FSCs and the HDC. The location of the bulk refueling site and the quantity of issue is transmitted using FBCB2 to the receiving unit and the supply and transportation platoon. The HDC provides DS support to the brigade troops and backup/reinforcing support to the FSCs. The FSC support operations and the BN/TF S4 will coordinate the refueling site and quantity of issue for the maneuver companies using FBCB2. Fuel HEMTT tankers located in FSC accomplish the tactical refueling operations for the maneuver companies. Figure 7-4 depicts Class III(B) operations.

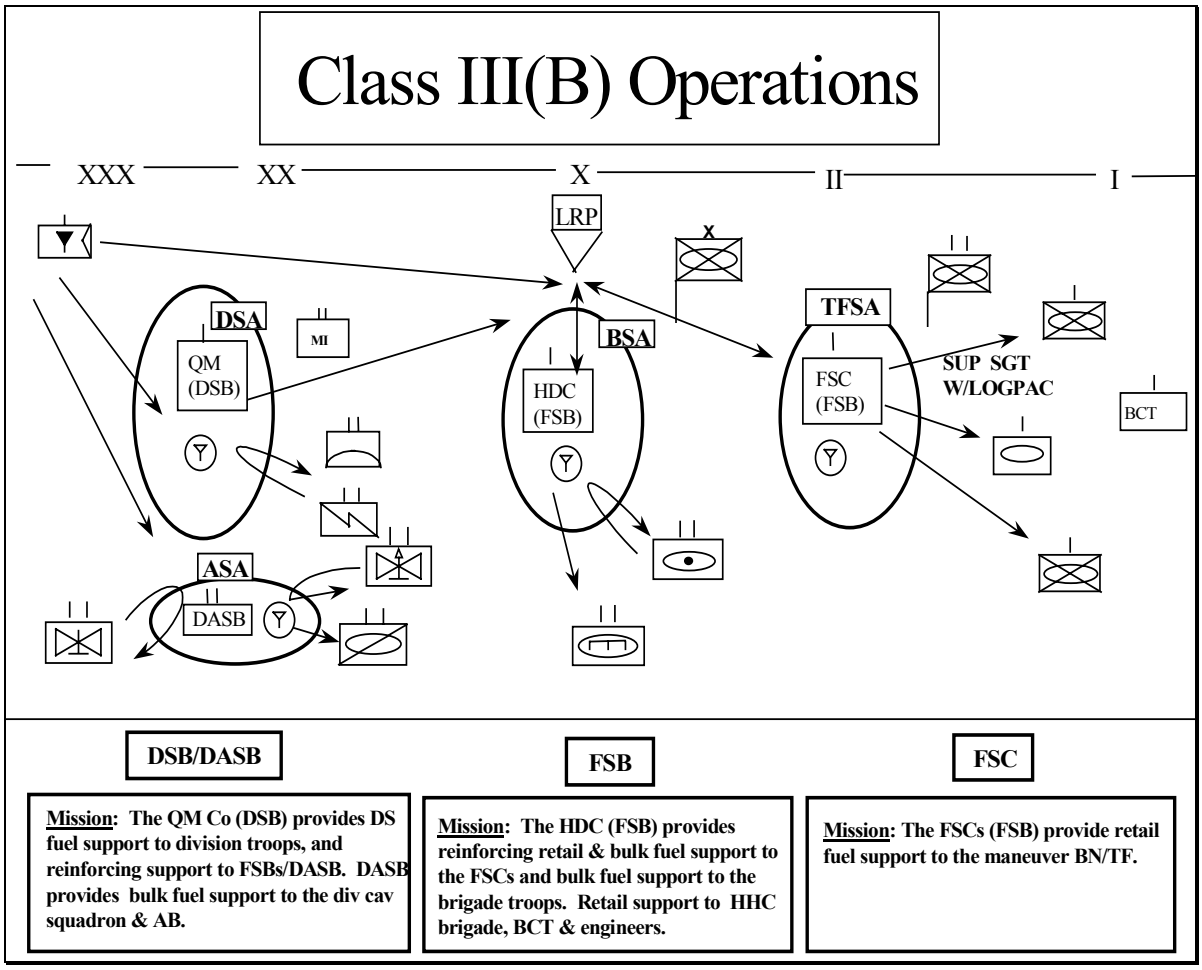

Figure 7-4. Class III(B) Operations

FIXING THE FORCE

7-18. The overarching principle of performing maintenance as far forward as possible on the battlefield remains unchanged. Maintainers accomplish their mission by using advanced diagnostics and prognostics to diagnose to the major component fault, at which point, the component is replaced under the "replace forward" concept. "Replace forward" focuses on "on-system" maintenance tasks or those tasks that can be performed at the breakdown site, if possible, or UMCP. In the redesigned division, maintenance doctrine and procedures have been changed to gain greater effectiveness and efficiencies. One area that will require greater attention is automation maintenance.

AUTOMATION MAINTENANCE

7-19. The digitized division depends on a significant number of automated systems to accomplish its missions in both peacetime and wartime operations. Automation is a critical component of gaining information dominance, shaping the battlespace, conducting decisive combat, and protecting the force. The number of automated systems in the division, which will include ABCS systems, FBCB2, GCSS-A, laptop and desktop computers, and computers designated as servers, will increase drastically.

7-20. A major part of the success in leveraging all this automation involves the development of an integrated maintenance plan for keeping all the associated hardware and software operational and functioning. The maintenance plan must be integrated to maximize operator level, organizational, and direct support maintenance capabilities within the division and the reinforcing direct support and contractor maintenance capabilities at echelons above division.

7-21. Development of a successful automation maintenance plan at the DASB level in support of a brigade combat team's battlespace involves the following considerations:

7-22. A viable PMCS program for all automated systems that can be executed at operator level (this may entail the local development of automation PMCS kits that consist of compressed air, keyboard covers, lint sheets, and disk drive cleaners for CD ROM disks, magnetic optical disks, and floppy disks). This must be coupled with an established maintenance cycle for automation that focuses on periodic checks and services.

7-23. Clearly defined levels of maintenance responsibility for soldiers (31U/74B/35J) and contractor personnel that define who is authorized to perform certain maintenance related functions as well as identification of any warranty exceptions that may be required.

7-24. Proper positioning on the battlefield of automation related "combat spares"/ASL (cables, T-connectors, keyboards, disk drives, motherboards, UPS, etc…) that supports the replace forward/fix rear maintenance concept.

7-25. Identification of applicable tool sets and kits needed to support automation maintenance and equipping maintainers at appropriate levels with the proper tools to perform their mission.

7-26. A clearly defined division automation evacuation and repair plan that contains procedures and SOPs for contacting "Help Desks", packaging and preparation of hardware for evacuation to higher echelons, and issuance of spare or "float" automation equipment. The focus of this plan must be on maximum reduction of repair cycle time.

7-27. Other considerations at division level for automation maintenance include:

- A comprehensive training plan for exposing soldiers to automation maintenance at the operator level. This must parallel vehicle maintenance programs to the degree that maintenance of automation becomes a periodic, sustained process. Automation, like vehicles, must be viewed as combat systems and cared for accordingly.
- Increase operator confidence in troubleshooting and repairing automation systems. Reduce operator dependency on contractors and logistics assistance representative (LARs) from AMC electronic systems support center (ESSC) to solve operator and organizational problems. Free ESSC personnel to focus on isolation and repair of maintenance faults that cannot be resolved by division's organic maintenance assets.
- Proper positioning of contractor personnel and LARs from AMC ESSC in the division area. Consider establishment of various "Help Desks" at different echelons within the division battlespace (i.e. at brigade level).
- Identify duties and responsibilities of various personnel, units, and battle staff sections regarding automation maintenance. Clearly define what tasks and functions that the operators, the CSSAMO, the various S6 sections at different echelons, maintenance units, and contractors are responsible for.
- Rehearse evacuation and replacement procedures for combat critical automation systems such as FBCB2, ABCS (MCS, CSSCS, AFATDS, ASAS, AMDWS, and selected GCSS-A systems.

DIVISION AVIATION SUPPORT BATTALION MAINTENANCE CAPABILITY

Aircraft Maintenance

7-28. The AMC is an integral component of the DASB that provides aviation intermediate level maintenance for divisional aircraft. The company is structured to support the aircraft assigned to the division, specifically the observation, utility, and attack helicopters. The objective of aircraft maintenance is to ensure maximum availability of mission-capable aircraft. The purpose of aircraft maintenance is to return the maximum number of aircraft to mission capable status through the accomplishment of maintenance where it can be most effectively and economically performed. It is normally located in the aviation support area (ASA). The AMC performs extensive on-aircraft systems maintenance. This maintenance includes:

- Making structural and airframe repairs.
- Repairing components for immediate reinstallation on aircraft or to support its organic reparable exchange program.
- Performing scheduled AVIM-level inspections.

- Serving as the next-level processing agency for aviation brigade (AB) supply transactions under an automated system. This includes the receipt, storage, and issue of repair parts. It also includes the control and distribution of aviation intensively managed items (AIMI).
- Performing pass-back unit level aircraft maintenance support to the AB's aircraft

7-29. The AMC employs mobile, weapon system-oriented forward repair/recovery teams to perform authorized intermediate maintenance in the forward areas.

7-30. The AMC provides limited collection, classification, and recovery of serviceable and unserviceable materiel. It also maintains an aircraft combat maintenance/battle damage assessment and repair (BDAR) capability.

7-31. The AMC sends teams forward to assist with onsite aircraft combat maintenance, battle damage assessment and repairs, and to recover downed aircraft. The AMC provides support, as required, for all recovery missions. The intent is to return damaged aircraft to the battle as quickly as possible using specialized assessment criteria, repair kits, and specially trained personnel. The aircraft combat maintenance and BDAR team is formed from AVUM/AVIM assets and at a minimum includes a trained inspector for damage assessment, two or three repairers, and a maintenance test pilot. The composition of the team is dictated by specific mission requirements. Upon notification of a damaged aircraft, the AMC commander will dispatch a recovery crew to conduct an initial on-site inspection. The recovery crew makes an assessment of the situation and performs one of the following actions based on the condition of the aircraft. The order of recovery method is as follows:

- Apply temporary repairs to return the aircraft to the battle in less than a fully mission capable (FMC) status.
- Apply temporary repairs to allow a one-time flight to a more secure maintenance area.
- Rig for aerial or ground recovery.
- Cannibalize critical components and as directed, abandon or destroy the aircraft.

7-32. When a downed aircraft cannot be flown out under its own power, the recovery team determines the best method of recovery and implements that recovery action.

7-33. Aerial recovery is accomplished by preparing the aircraft for movement, attaching suitable airlift recovery equipment and connecting it to the lifting helicopter, and flying the aircraft to the maintenance area. Planning for aerial recovery entails a thorough analysis of the recovery site characteristics and the threat associated with relatively slow air movement over the battlefield.

Aerial recovery, when compared to ground recovery, has both advantages and disadvantages. Advantages are:

- Reducing the amount of time recovery assets are exposed to possible enemy contact.
- Requiring less aircraft sling load preparation.
- Normally, reducing the amount of security required to protect and defend the recovery site.

7-34. The disadvantages are the risks associated with exposing additional aviation assets.

7-35. Ground recovery and evacuation utilizes ground equipment and wheeled vehicles to deliver a disabled aircraft to a maintenance facility. The planning of a surface recovery follows logical steps. After evaluating the aircraft to be recovered, choose the type of equipment and transportation means required for the recovery. Then conduct a thorough reconnaissance and evaluation of the available ground routes to and from the recovery site. Further considerations include the characteristics of the recovery site and factors concerning the tactical situation. Ground recovery advantages include:

- Reducing the enemy's visibility of recovery asset movements.
- Reducing the risk associated with the recovery operation because executing a ground recovery of an aircraft is generally easier to accomplish than an aerial recovery.

7-36. Disadvantages include the amount of time required to conduct a ground recovery to include the amount of aircraft preparation required.

Ground Maintenance

7-37. The GMC provides field maintenance for all DASB non-air items and direct support (DS) maintenance for AB division cavalry squadron non-air items, including automotive, engineer, utility, power generation, C-E equipment, and small arms.

7-38. The GMC's mission is to provide support as far forward as possible to return ground combat systems to the battle rapidly. Based on METT-TC, parts availability, tools, test equipment, and mechanic expertise, mechanics perform maintenance at the point of breakdown or the equipment is recovered to a maintenance collection point (MCP) for repair. Repairs are accomplished through the replacement of major component items, i.e. major assemblies or line replaceable units (LRU). When time is limited, maintainers may perform battle damage assessment and repair (BDAR) IAW BDAR technical manuals (TMs) to return the combat system to the fight. After the mission is completed, mechanics return to the combat system and complete the required maintenance IAW equipment's TM. The GMC maintenance control section coordinates the recovery and/or evacuation of equipment that can not be repaired due to the tactical situation, extent of

damage, and/or limited availability of resources. Equipment may be recovered or evacuated to a MCP, the ASA, or other maintenance activity capable of performing the repairs. The GMC:

- Performs DS maintenance for the aviation brigade and supported elements, including repair of small arms and of communications, engineer, power generation, automotive, and utility equipment.
- Operates a collocated ASL for ground and air Class IX to support the aviation brigade. Though collocated, air and ground ASL stocks will not be intermingled.
- Performs consolidated unit maintenance for all DASB units.
- Provides technical assistance to supported unit maintenance operations within the brigade.
- Provides limited recovery assistance to supported units.
- Provides reparable exchange (RX)

7-39. The cavalry system support team (CSST) is structured to support the division cavalry squadron. This team normally operates out of the cavalry squadron combat trains area. It is reinforced with other GMC elements as necessary. The team repair capabilities include automotive/tracked vehicles, armament/fire control systems, ground support equipment, and communications-electronics equipment. The CSST also has an organic recovery capability. Figure 7-5 depicts how the division will fix the force.

CONTROLLED EXCHANGE

7-40. Controlled exchange is the removal of serviceable parts, components, or assemblies from unserviceable, but economically reparable equipment and their immediate reuse in restoring a like item of equipment to combat operable or serviceable condition. Guidance for the use of controlled exchange should be addressed in the unit TSOP.

CANNIBILIZATION

7-41. Cannibalization is the authorized removal of parts, components, or assemblies from economically nonrepairable or disposable end items. Cannibalization supplements and supports the supply operation by providing assets not readily available through the normal supply system.

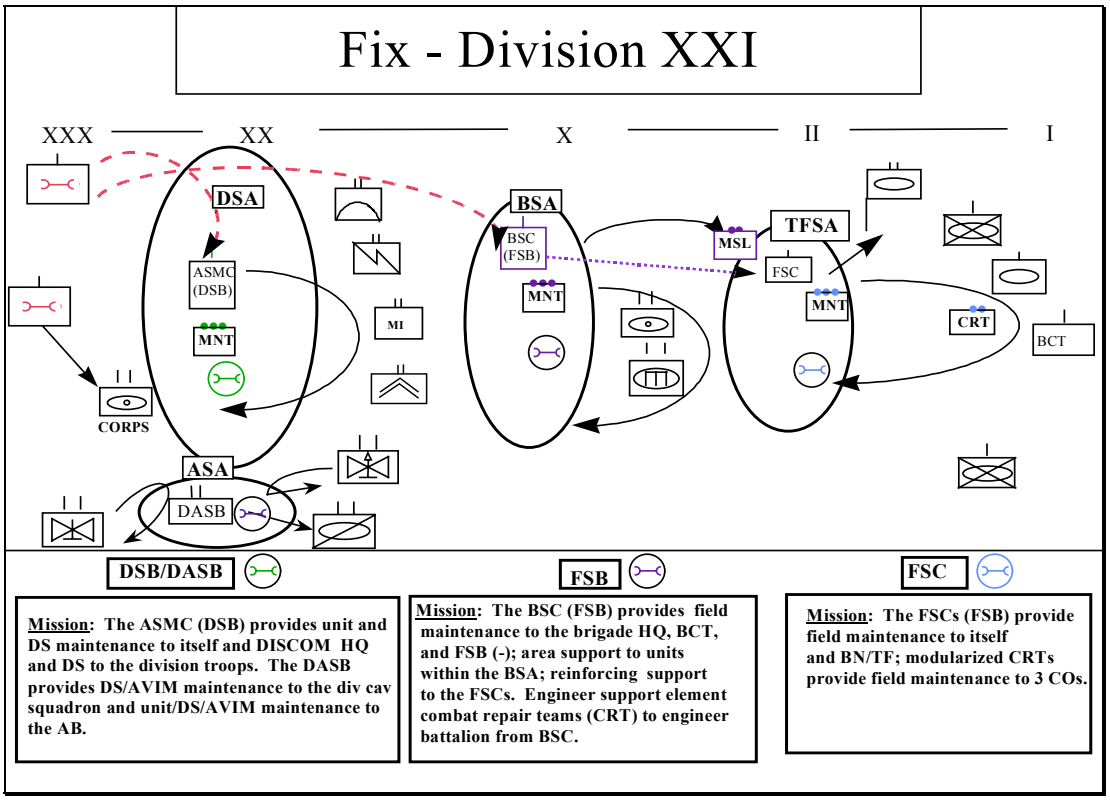

Figure 7-5. Fix Division XXI

MOVING THE FORCE

DIVISION TRANSPORTATION OPERATIONS

7-42. The division support command (DISCOM) provides direct support CSS to the division. The foundation of this support is a single CSS operator providing unity of command and centralized distribution management at all echelons to meet the maneuver commander's intent. Under Force XXI operations, this doctrinal premise is dependent upon battlefield distribution, throughput to forward areas, and improved situational understanding through the application of enabling technologies.

7-43. Significant changes in division transportation operations under Force XXI operations include: an improved division transportation motor transport (TMT) company design that replaces the M931 tractors/M871 trailer combinations with palletized load handling systems (PLS); merger of movements and materiel management at the DISCOM distribution management center (DMC); reliance on corps throughput for sustainment resupply; transportation assets forward in the supply & transportation platoons of the support companies (HDC and FSCs); and movement managers located in the FSB support operations section

to provide movement control and transportation coordination for the maneuver brigade.

7-44. In order to maximize division transportation capability, planners and operators must employ the Force XXI CSS integrating imperatives discussed below as the basis for all transportation operations.

Unity of Command, Centralized Distribution Management

7-45. Synchronizing movement and materiel management and maintaining integrated end-to-end visibility of transportation assets is key to the successful operation of an efficient, fully integrated transportation system at the division level. The DISCOM movement control officer (MCO) performs this function for the division as a member of the DISCOM commander's staff and is located in the DISCOM's distribution management center. The movement control NCO performs this function for the maneuver brigade and is located in the FSB support operations section.

Increased Velocity, Throughput to Forward Areas

7-46. Throughput operations bypass one or more echelons in the distribution pipeline to minimize handling of cargo and improve velocity on the battlefield. Direct throughput relies on unity of command and situational understanding to effectively implement the use of transportation assets and to divert, re-route; and ensure continuous movement of supplies into through, and out of the division area. The DISCOM MCO maintains constant in-transit visibility (ITV) of corps sustainment resupply convoys entering the division rear boundary through MTS and other ATCCS. The movement control NCO in the FSB support operations section maintains constant ITV of all corps (or division) sustainment resupply convoys in/out of the BSA through movement tracking system (MTS). The FSB movement control NCO also synchronizes delivery schedules via Force XXI battle command brigade and below, FBCB2 with customer units to complete throughput to forward areas.

Increased Velocity, Minimize Load Handling

7-47. Minimizing load handling of cargo and reducing materiel handling equipment requirements are essential to successful throughput to forward areas under Force XXI CSS doctrine. Transportation corps materiel enabling technologies such as the PLS, HEMTT-LHS, and CROP significantly reduce handling requirements over break-bulk methods. These systems extend distribution throughput capability and enhance velocity through flatrack exchange at the division, brigade, and task force support areas. Transportation managers will coordinate efficient flatrack exchange and maximize flatrack load capacity and retrograde operations.

MOTOR TRANSPORT AND MOVEMENT CONTROL OPERATIONS IN THE DIGITIZED DIVISION

7-48. Movement and maneuver of combat forces are normally given priority over other movements, even though CSS traffic is essential to the success of battles. Movements planning and execution in the division are staff responsibilities, rather than being vested in operational units found at corps and above. Transportation mode operators and movement control elements at division level manage the movement of noncommitted units in the division area and requires close coordination between the division's G3 and G4. The G3 plans and directs maneuver. The G4, through the division transportation officer (DTO), DISCOM distribution management center (DMC), and DISCOM MCO coordinates and controls division transportation operations. Planning and regulating movement requires close coordination among the division staff and the commanders and staffs of brigades, separate battalions, and separate companies.

7-49. The division G4 DTO is the primary advisor to the division commander, the coordinating staff, special staff for transportation matters, and is the formal link between the division and corps. The DTO plans for movement of the division by all modes based on the division commander's guidance. The DTO develops and coordinates movement control and highway planning with division staff, the corps transportation officer (CTO), and division support command movement control team (MCT), habitually supporting from corps. The division G3 prioritizes CSS movement and tactical maneuver missions in support of the division operation and the DTO incorporates these priorities into all movement planning. The DTO participates in the military decision making process as a member of the division planning staff and recommends the allocation of division transportation assets and establishment of MSRs. The DTO will provide the DISCOM MCO with broad policy guidance and basic plans for the division road network written in the highway regulation and traffic circulation plans (movement annex) of the division OPLAN/OPORD.

7-50. The DISCOM MCO supports movement control through planning, and controlling the taskings to the TMT company. The TMT company commander provides a current status of fleet availability to the MCO. The FSB, DASB, and DSB support operations sections, as well as separate companies and battalions supported by the DISCOM pass requests for movements to the MCO. The MCO balances the requests to the availability of TMT company assets, then assigns the missions to the TMT.

7-51. When transportation requirements exceed capabilities, the MCO must decide whether to wait for TMT company assets to become available or forward the mission to corps for support. If forwarded to the corps, the request is submitted through the DTO to the division MCT. The supporting division MCT submits the request to the CSG(F)'s supporting area MCT. The transportation

support will come from the supporting corps support group's (CSG) transportation units. The MCO is responsible for ensuring that transportation assets are properly employed and promptly released when missions are completed.

7-52. The DISCOM MCO develops the division movement program based on the G4 logistics planner's combat service support annex of the division OPLAN/OPORD and adheres to guidance within the division movement annex. The MCO coordinates with the materiel managers of the DISCOM DMC to determine and plan for transportation of materiel and assists in the development of the CSS synchronization matrix.

7-53. The MCO coordinates with subordinate support operations movement/materiel managers to ensure delivery of sustainment supplies to the correct location and integrates retrograde movement of equipment, flatracks, and personnel. Throughput distribution is the preferred method of delivering commodities and supplies to requesting supply support activities or to the user. Sustainment materiel delivered to the DSB, DASB, and FSB will normally be scheduled deliveries and synchronized with subordinate support operations sections and customer units. Corps transportation assets contact the movement managers (MCO and DSB/DASB/FSB distribution managers) through MTS when entering the division/brigade rear boundary(s) and delivering to the DSA, ASA, or BSA logistics release points (LRPs). The movement managers will forward the coordinating information through their supporting area MCTs to the division via MTS. All divisional and non-divisional units operating in the division rear area will submit transportation requests and movement clearance requests to the DISCOM MCO. Figure 7-6 depicts the division movement control flow.

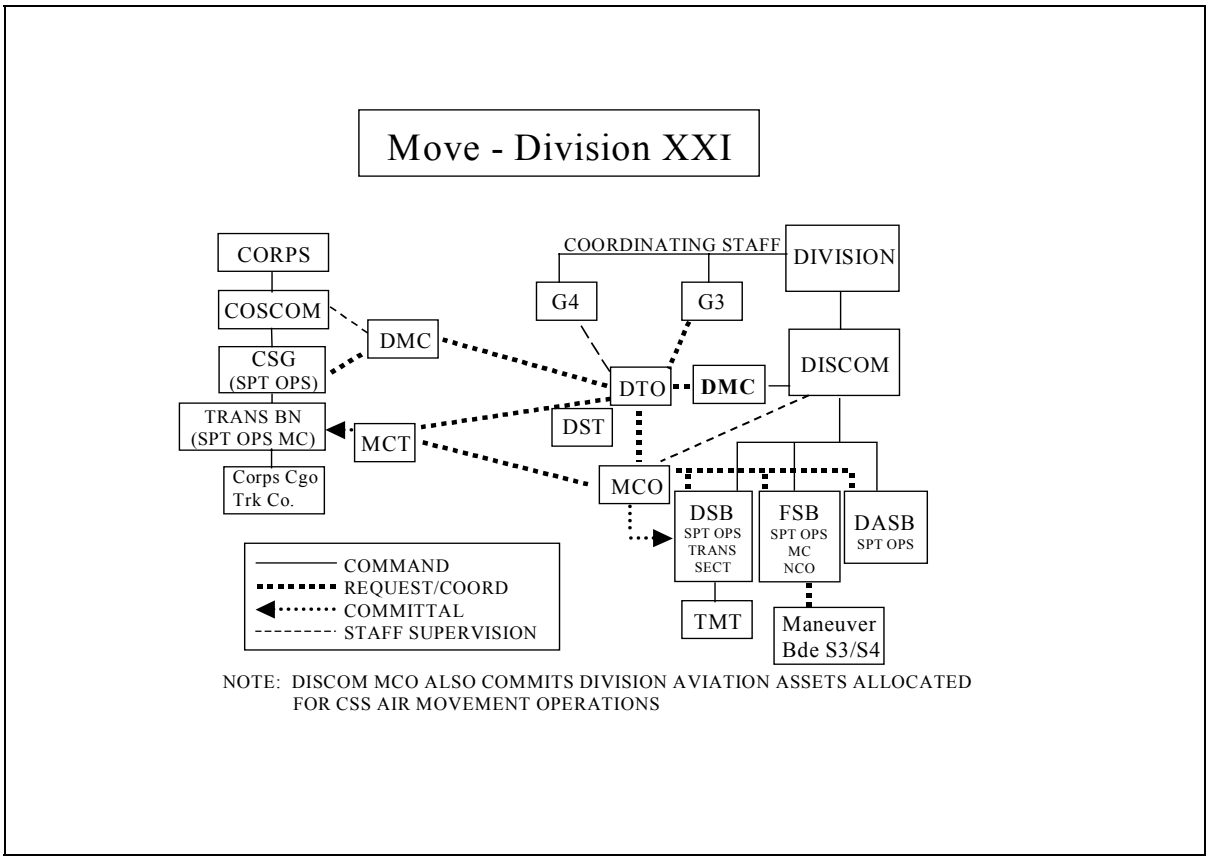

Figure 7-6. Division Movement Control

7-54. Transportation operations and movement control in the maneuver brigade is a CSS staff responsibility The brigade S4 provides the brigade commander with overall staff responsibility for highway regulation and MSR/ASR establishment in the brigade area in coordination with the brigade S3's priority of movement and the DTO's highway regulation and traffic circulation plans. Movement control at the brigade level requires close coordination between the brigade S4, DISCOM MCO, FSB support operations officer, and the battalion S4/FSC support operations officer at the BN/TF level.

7-55. The movement of the maneuver brigade is coordinated and synchronized with the division G3, G4, and the DTO. Unless the movements are planned concurrently with the tactical plan, the best plans can be thwarted by road congestion. The brigade S3 approves all tactical movements in the brigade's battlespace. The brigade S3 must also maintain visibility of CSS movements to ensure they are synchronized with the scheme of the tactical movement. The brigade S4 plans, and manages all movements with assistance from the FSB support operations.

7-56. The FSB support operations section assumes the distribution management center's role in providing continuous and responsive sustainment to the brigade through a variety of STAMIS and ATCCS managed by the section. The FSB's limited distribution capability relies heavily on support from the DISCOM and corps for sustainment throughput. The FSB's distribution manager synchronizes the delivery schedule with customer units and transfers information between the brigade S4 and the battalion S4/FSC support operations section (via MTS) to schedule and synchronize transportation requirements within or in direct support of brigade or battalion operations. For supplemental transportation support and coordination on inbound and outbound shipments the FSB movement control NCO coordinates with the DISCOM MCO through MTS

7-57. The FSC support operations section assumes the movement and materiel management and maintenance (evacuation) functions of a DMC at the lowest echelon of support to a battalion task force. The FSC support operations officer coordinates with the task force S4 and synchronizes the delivery of all classes of supply with customer units and transfers requirements and capabilities to the FSB support operations officer (info copy to FSC Cdr.). The FSC support operations officer schedules and synchronizes transportation support, and the FSC rear CP coordinates inbound and outbound shipments with the FSB movement control NCO through MTS.

FIRST DESTINATION REPORTING POINT

7-58. A first destination reporting point (FDRP) is normally established along a MSR at or near the division rear boundary. The FDRP is a point manned by a movement regulating team, a movement control team, or military police that diverts a driver and cargo to an alternate consignee or destination. Basically, FDRPs are logistical information checkpoints. FDRPs support velocity management and situational understanding.

7-59. Even though the division is digitized, a FDRP is routinely required since many echelon above division (EAD) supporting units, host nation support, and/or contractors will be non-digitized. Either the division or an EAD unit can operate the FDRP. Optimally, both the division and supporting EAD headquarters have representatives located at the FDRP continuously. Security arrangements, command and control, and communications support must be addressed prior to FDRP establishment. Further amplification of FDRP operations can be included in unit SOPs. Some tasks performed at the FDRP are below:

- Track location of critical supplies.
- Perform movement control functions.
- Provide instructions to convoys.
- Provide and receive latest intelligence.

- Reroute convoys/vehicles.
- Provide information on routes and weather.
- Establish division "light line" for black-out driving.
- Linkup point for armed convoy escort vehicles.

FLATRACK MANAGEMENT OPERATIONS

7-60. Flatracks offer tactical efficiencies that serve an increased pace of logistical operations and significantly alter the speed at which service support is provided to the warfighters. The key to sustaining these efficiencies and maintaining improved throughput velocity is flatrack employment, management, and retrograde procedures at each echelon of support. An increased battlespace depth and a reduction of CSS force structure challenge flatrack management and ultimately sustainment of combat power within the FXXI division area of operations. Flatrack management is a challenge that must be met in order successfully sustain combat power on the FXXI battlefield.

7-61. Flatrack employment, management, and retrograde operations are the responsibility of distribution managers integrated at each echelon of support throughout the division area. Flatracks will be dispersed throughout the distribution pipeline, particularly from the division rear boundary to the combat trains command post of a maneuver task force. It is imperative that stringent flatrack management procedures be implemented at the tactical level on an area basis.

Task Force Support Area Flatrack Management Operations

7-62. The FSCs operating TFSAs face increased flatrack management challenges they are mobile units with limited transportation assets to move supplies and retrograde flatracks. Flatrack management responsibilities within the TFSA rest with the FSC support operations officer and the FSC S&T platoon leader. The FSC support operations officer flatrack responsibilities include:

- Identifying a proposed flatrack collection point (FRCP) upon occupation of the TFSA in coordination with the FSC S&T platoon leader.
- Managing all common user flatracks on an area basis.
- Ensuring flatrack exchange (providing a back hauled flatrack for every received) procedures are adhered to as a matter of priority.
- Maximizing the use of FSC S&T LHS for retrograding flatracks from the FRCP back into the distribution pipeline.
- Reporting flatrack on-hand quantity by location, status, and condition to the FSB support operations office movement control (MC) NCO.

- Coordinating with the FSB support operations MC NCO for supplemental transportation support when retrograding flatracks from the TFSA FRCP.

7-63. The FSC S&T platoon leader flatrack responsibilities include:

- Identifying a proposed flatrack collection point (FRCP) upon occupation of the TFSA in coordination with the FSC support operations officer.
- Ensuring flatrack exchange procedures are adhered to as a matter of priority.
- Collecting and consolidating empty flatracks across the BN/TF sector.
- Reporting flatrack on-hand quantity by location, status, and condition to the FSC support operations officer.
- Back hauling/cross leveling items on flatracks such as ammunition residue, trash, remains, unserviceable parts/assemblies, as directed by the FSC support operations officer.

7-64. Flatrack exchange is the preferred method for retrograding flatracks from the TFSA. Flat rack collection points are designated for flatrack consolidation purposes when required and this proposed location is reported to the FSB support operations officer. Logistics release points (LRPs), supply routes, feeder routes accessing supply routes, other collection points, and force protection measures are considered when selecting these locations. Flat rack collection points can also be collocated within the existing TFSA FSC perimeter or consolidated with adjacent FSCs to maximize force protection resources.

Brigade Support Area Flatrack Management Operations

7-65. A FSB operating in the BSA has flatrack management responsibilities for all flatracks throughput to and retrograding from the brigade area. Flatrack management responsibilities within the BSA rest with the FSB support operations office, supply & services movement control (MC) NCO and the HDC S&T platoon leader.

7-66. The FSB support operations MC NCO flatrack responsibilities include:

- Identifying a proposed flatrack collection point (FRCP) upon occupation of the BSA in coordination with the HDC S&T platoon leader.
- Managing all common user flatracks on an area basis.
- Ensuring flatrack exchange procedures are optimized using division and corps throughput assets as a matter of priority.
- Maximizing the use of HDC S&T LHS for retrograding/back hauling flatracks from the FRCP back into the distribution pipeline.

- Reporting flatrack on-hand quantity by location, status, and condition to the movement control office (MCO), DMC, DISCOM.
- Monitoring the status and location of FSC FRCPs.
- Coordinating with the DISCOM MCO for supplemental transportation support when retrograding flatracks from BSA FRCP.

7-67. The HDC S&T platoon leader flatrack responsibilities include:

- Identifying a proposed flatrack collection point (FRCP) upon occupation of the BSA in coordination with the FSB support operations office MC NCO.
- Ensuring flatrack exchange procedures are adhered to as a matter of priority.
- Collecting and consolidating empty flatracks/back haul items across the brigade rear area and at TFSA FRCPs.
- Reporting flatrack on-hand quantity by location, status, and condition to the FSB support operations MC NCO.
- Retrograding unserviceable assemblies/parts, supplies, trash, remains, or any back hauled/cross-leveling item on flatracks as directed by the FSB support operations office MC NCO.

7-68. The preferred method for retrograding flatracks from the BSA is flatrack exchange with the FSCs, division rear support units, and corps sustainment resupply convoys. Flat rack collection points are designated for flatrack consolidation purposes when required and this proposed location is reported to the DISCOM MCO. Logistics release points (LRPs), supply routes, feeder routes, accessing supply routes, supply support activity, and other collection point locations, and force protection measures are considered when selecting these locations. They can also be collocated within existing logistical nodes to maximize force protection resources.

Division Rear Area Flatrack Management Operations

7-69. The division support operations office has flatrack management responsibilities for all flatracks throughput to and retrograding from the division rear area. Overall flatrack management responsibility within the division rear area rests with the DISCOM MCO. The DISCOM MCO has flatrack management and status reporting responsibility to the supporting area movement control team (MCT) of the supporting corps support group.

7-70. Within the division rear area, flatrack management responsibilities are delegated further on an area support basis. The DSA and the ASA assume flatrack management responsibilities for their respective areas. The DSB support operations office, transportation section (in the DSA) and the DASB support operations office (in the ASA) are charged with collecting empty flatracks within their area of responsibility and providing a daily flatrack status report to the DISCOM MCO.

7-71. The preferred method for retrograding flatracks for the DSB and the DASB is flatrack exchange with corps sustainment resupply convoys. The DISCOM MCO, in coordination with the DSB and DASB, identifies proposed FRCPs upon occupation within the division rear area. The FRCPs are designated for flatrack consolidation purposes when required and this proposed location is reported to the supporting area MCT. Supply routes, LRP, feeder routes accessing supply routes, supply support activity and other collection point locations, and force protection measures are considered when selecting these locations. FRCPs can also be collocated within existing logistical nodes to maximize force protection resources.

7-72. The DISCOM MCO, DSB, and DASB manage all common user flatracks on an area basis, ensure flatrack exchange procedures are optimized using division and corps assets as a matter of priority, and maximize the use of TMT company PLS for retrograding flatracks from the FRCPs back into the distribution. The DSB and DASB support operations offices coordinate with the DISCOM MCO for supplemental transportation support for flatrack retrograding from their respective areas. DISCOM MCO submits requests for supplemental transportation support to the supporting area MCT for flatrack retrograding from the division rear support area FRCPs.

Flatrack Reporting Procedures

7-73. Accurate daily reporting of flatracks in a unit's area of responsibility by location, status, and condition is critical to efficient management of this crucial asset within the distribution pipeline. A separate report is not required for reporting flatrack status. Flatrack managers roll flatrack status into existing reports. Requests for supplemental transportation to retrograde flatracks on the battlefield are submitted as routine transportation requests through support operations channels. Flatrack procedures outlined in this appendix will be incorporated into unit tactical standing operating procedures (TACSOPs). Figure 7-7 depicts the digitized division's flatrack management flow.

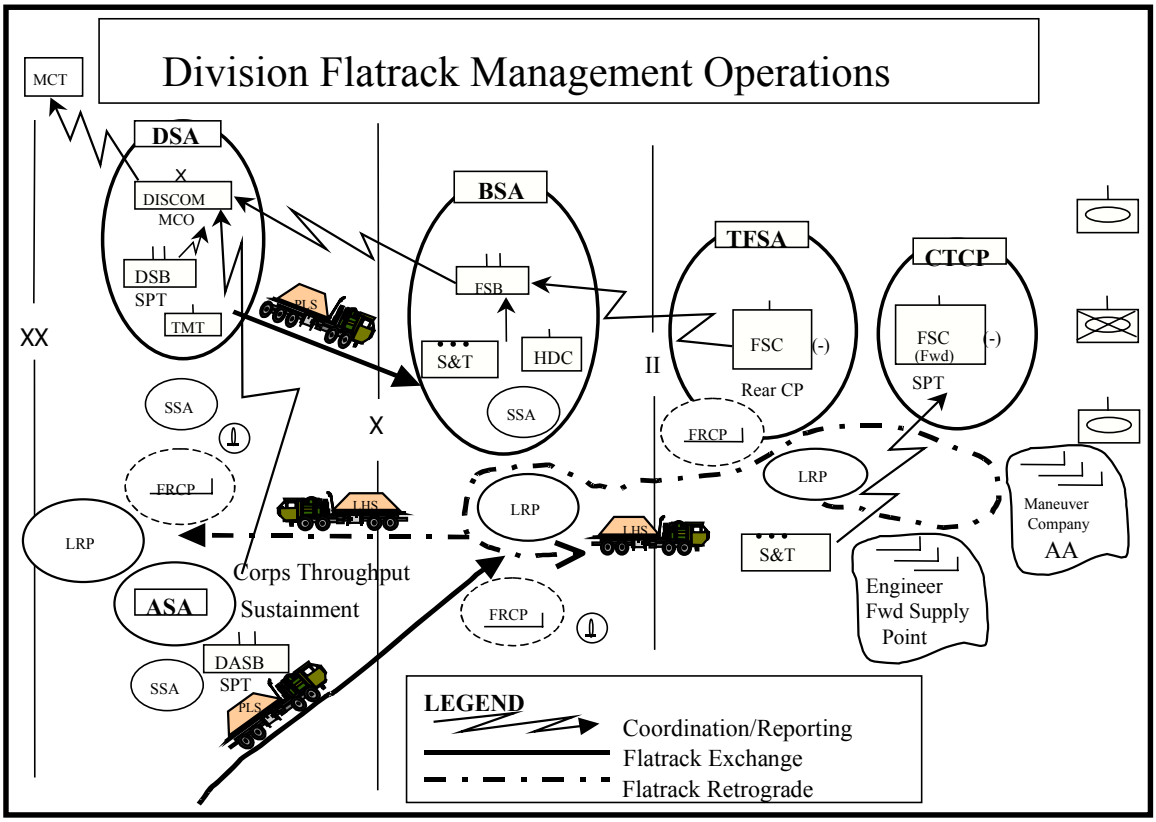

Figure7-7. Division Flatrack Management Operations

ARMY AIRCRAFT SUPPORT

7-74. Logistics planners categorize air movements request as preplanned or immediate. Units submit preplanned requests to satisfy programmed requirements 24-hour or more in advance. Immediate requests are initiated when there is less than 24-hour notice, support is absolutely essential to the survival of the unit, or when lack of support will result in complete mission failure.

7-75. Units submit requests to the DASB movement control NCO who forwards requests to the MCO at the DISCOM DMC. If the MCO determines use of aviation assets is appropriate, the request is forwarded through the DTO to the division G3 air officer. The G3 air officer allocates helicopter lift support by balancing combat, combat support, and CSS requirements. If divisional assets are not available the DTO submits a request through the CMCC to higher headquarters. For immediate requirements the DTO coordinates through division G3 air to corps G3 air.

7-76. When aviation assets are dedicated to CSS distribution missions for certain periods of time, the aviation brigade sends a liaison officer to the DMC movement control office of the DISCOM support operations. If aviation assets are required for CSS distribution missions, the MCO submits preplanned requests for these assets from the flight opns/S3 of the aviation brigade through the liaison officer (info copy to DTO). This liaison officer advises the MCO on capabilities and limitations of the aircraft, particularly the lift capability for current environmental conditions.

7-77. The MCO provides movement requirements including size of the load, pickup and delivery times, location of landing zones, and any special handling requirements pertinent to aircraft operations. The MCO also coordinates with the appropriate commodity manager within the DMC for transportation of supplies. If the aviation brigade is unable to support requirements, the MCO contacts the DTO. The DTO coordinates with the G3 air officer for verification and forwards the request to the corps through the division support MCT.

7-78. Units submit immediate requests for resupply and transportation through the same logistics channels as preplanned requests. However, the requests are submitted simultaneously through command channels from the unit to G3. The MCO will submit the request through the DTO, who verifies the request. Once verified, the DTO forwards the request to the G3 air via CSSCS. At the same time the G4 coordinates for immediate resupply with the DMC commodity manager to identify the appropriate supply company to prepare the immediate shipment (reference FM 55-450-5). If the aircraft is equipped with FBCB2 the pilot contacts the supported customer to finalize coordination. Information is passed to both the supporting and supported units as well as the responsible operations center/staff proponent.

GENERAL HELICOPTER CSS MISSION AREAS

Transition to War

- Self-deploy to area of operations.
- Provide early in-theater transport.
- Move priority cargo, weapons, ammo, POL and barrier material forward from ports/staging areas to establish supply points.

Deep Battle

- Move troops, equipment, weapons systems, ammo, POL, priority supplies from rear to forward staging areas to support deep battle operations.
- Deploy reinforcing units; evacuate wounded, recover battle-damaged equipment, and forward repositioning of artillery.

Covering Force and the Main Battle

- Support air assault units with rapid resupply of ammo and POL.
- Augment reaction forces into blocking positions to contain enemy.
- Rear battle.
- Move forces and equipment to counter operations in rear.
- Augment reaction forces into blocking positions to contain enemy.

Combat Support

- Emplacement, repositioning, resupply of forward area refueling points (FARPs).
- Rapid repositioning of reinforcement troops, equipment, artillery (etc.).
- Transport barrier materials, mines, bridging equipment for engineering support.

Combat Service Support

- Provide logistical air transport of cargo from rear to as far forward as brigade rear areas meeting time sensitive and surge demands.
- Deliver critical loads to areas not accessible by ground or Air Force airlift.

- Employed to move priority cargo to overcome congestion and enemy inflicted gaps in transportation system.

SUSTAINING THE FORCE

7-79. Sustainment is the provisioning of personnel, logistics, and other support required to maintain and prolong operations or combat until successful accomplishment or revision of the mission or of the objective.

CLASS I

7-80. Food is one of the most important factors affecting a soldier's health, morale, and welfare. However, the acquisition, storage, transportation, distribution, preparation, and serving of food have always been a logistics challenge. The Army field feeding system (AFFS) is based on three basic rations. The MRE is the individual combat ration. The T ration is a group-feeding ration, and the B ration is also a group feeding ration but one that must be prepared. the requirement to serve "three quality meals per day", with the capability to distribute, prepare, and serve a unitized group ration "A" (UGR-A), a "heat and serve" UGR meal, and a meal, ready to eat (MRE) individual ration" (Chapter 1, FM 10-23) after initial entry into the theater.

7-81. As the operational situation permits, efforts are made to distribute, prepare and serve the UGR-A introduce the A ration into the theater. This requires extensive planning and coordination. Some key points planners need to consider with the UGR-A rations are: refrigerated storage, distribution equipment, and the availability of ice for unit storage.

7-82. The FSC provides consolidated food preparation for the FSC and BN/TF. The FSC has the ability to prepare meals forward in each CO/TM area based on METT-TC. The food service section cooks the UGR-A, A, and B rations or heats the heat and serve meal T rations in its organic mobile kitchen trailer (MKT). Food can be packed in insulated food containers and sent with the LOGPAC to CO/TM location where CO/TM personnel serve the meals. The HDC, FSB provides food service support to itself, BSC(-), HHC brigade, brigade cavalry troop and FSMC. The engineer support element, BSC provides food service support to the engineer battalion. Food and beverage containers are sent back for reuse. Where practical, small units are fed by unit, designated on an area basis.

7-83. The Army field feeding standard for combat is one UGR-A(heat and serve), meal prepared (A or B), and an MRE each day. The wartime feeding policy assumed theater-wide use of MREs for the first several days of combat with the eventual transition to distribution and preparation of UGR meals, prepared T and B Rations.

7-84. The DISCOM receives headcount data for Class I from the FSB, DSB, and DASB support operations sections from CSSCS, and in turn sends it to CMMC. Corps or EAC will configure rations

in BN/TF sets and push them forward to the FSB, DSB, and DASB field ration issue point IAW the ration cycle. The FSB, DSB, and DASB support operations sections coordinate with supported units for the location of ration issue point and pick-up schedule. Figure 7-8, shows Class I resupply.

7-85. Rations are pushed forward to the FSB, DSB, and DASB field ration issue point based on personnel strength reports, planned operations, and anticipated task organization. The support operations Class I section converts this data to line requisitions that are sent to the CMMC. The Class I field ration issue point verifies shipping documentation with the shipment received. They also inspect shipments of ration for type, number, and condition or items received.

7-86. When the division is engaged in combat, the ration supplement health care package (HCP) is usually issued with the rations. Issue is to division troops and those attached troops operating in the division area. These supplement HCPs should not be confused with Class VI supplies. The HCP is composed of items essential to the health and comfort of troops. These items include toilet articles and confections. Pending establishment of adequate service facilities, this packet is made available in theaters of operations for issue.

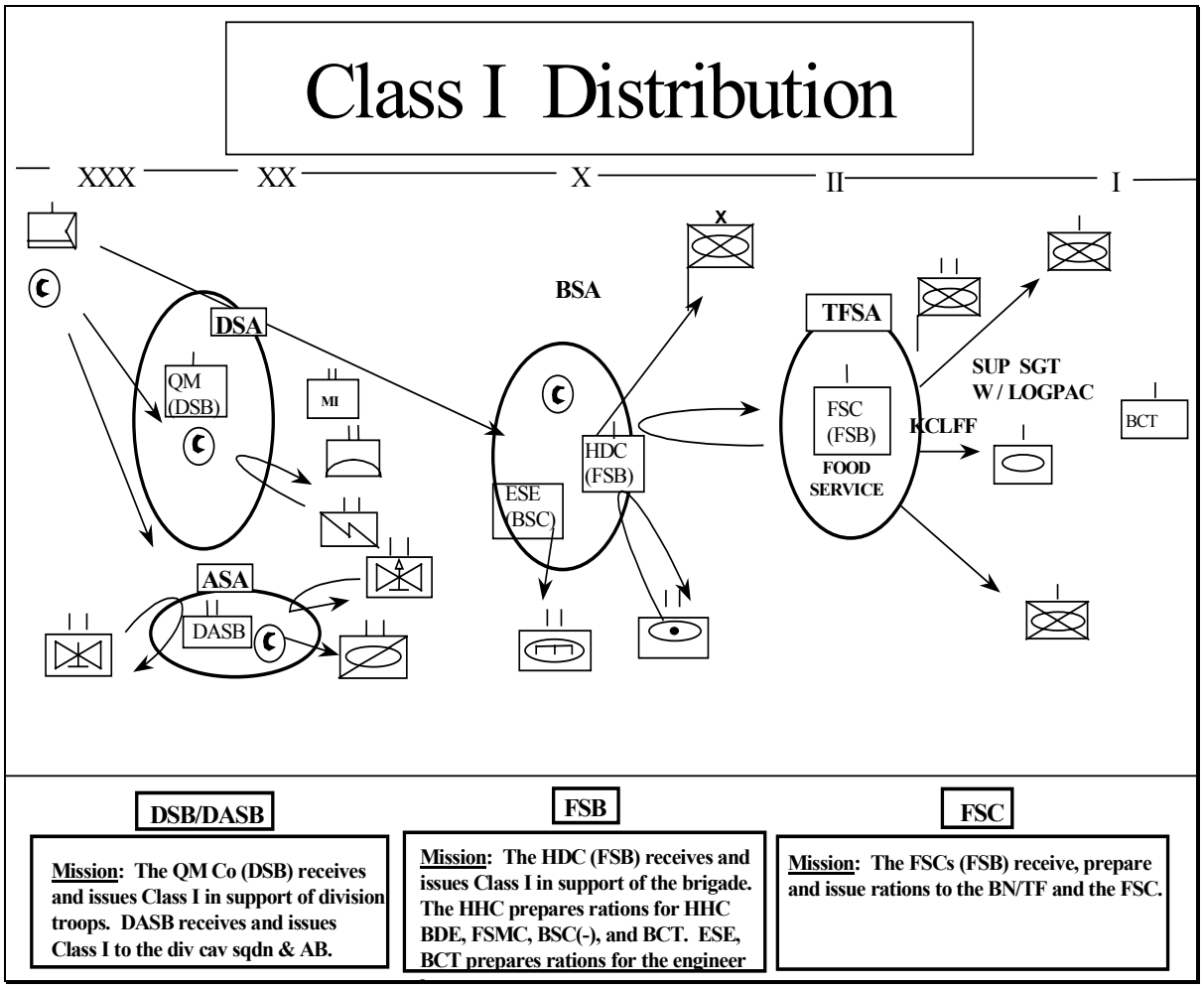

Figure 7-8. Class I Distribution

WATER

7-87. The Class III and water supply branch of the division support operations will manage water distribution within the division. Figure 7-9 shows the DISCOM water distribution organization. Water production and storage is provided to the division by an augmentation team from the modular water unit within the COSCOM. This water augmentation team is capable of establishing water points that produce, store and issue potable water. The augmentation team will establish water points in the DSB, DASB and each FSB. The team is dependent on the division for life support and force protection. Water points are normally attached to the support battalions.

7-88. Water points may produce, store, and issue or (without the availability of a suitable water source) simply store and issue potable water. In an arid environment, water points will receive additional storage capacity from the COSCOM. Within an arid environment or where there is no suitable water source, the COSCOM will deliver water as part of normal sustainment pushes. An adequate water source should be a consideration when selecting the division, aviation, and brigade support areas. Limited water sources may require massing production assets from the augmentation team and transporting the water to support area water points. Water distribution within the DSA, ASA and BSA will be through supply point distribution at the water points. The headquarters and support company's hardwall tankers will be used to distribute water to maneuver battalions. Maneuver company supply sergeants fill their water trailers at the TFSA according to an established schedule. Figure 7-9 shows water purification and distribution.

7-89. Bottled water may be locally procured or shipped from outside of the theater of operations. Bottled or packaged water is particularly well suited for reception, staging, onward movement, and integration (RSOI) and initial operation, however (situational dependent) may be routinely issued throughout an operation or conflict. It is normally distributed along with Class I. The Army Medical Command has the responsibility for quality surveillance and quality assurance for bottled water.

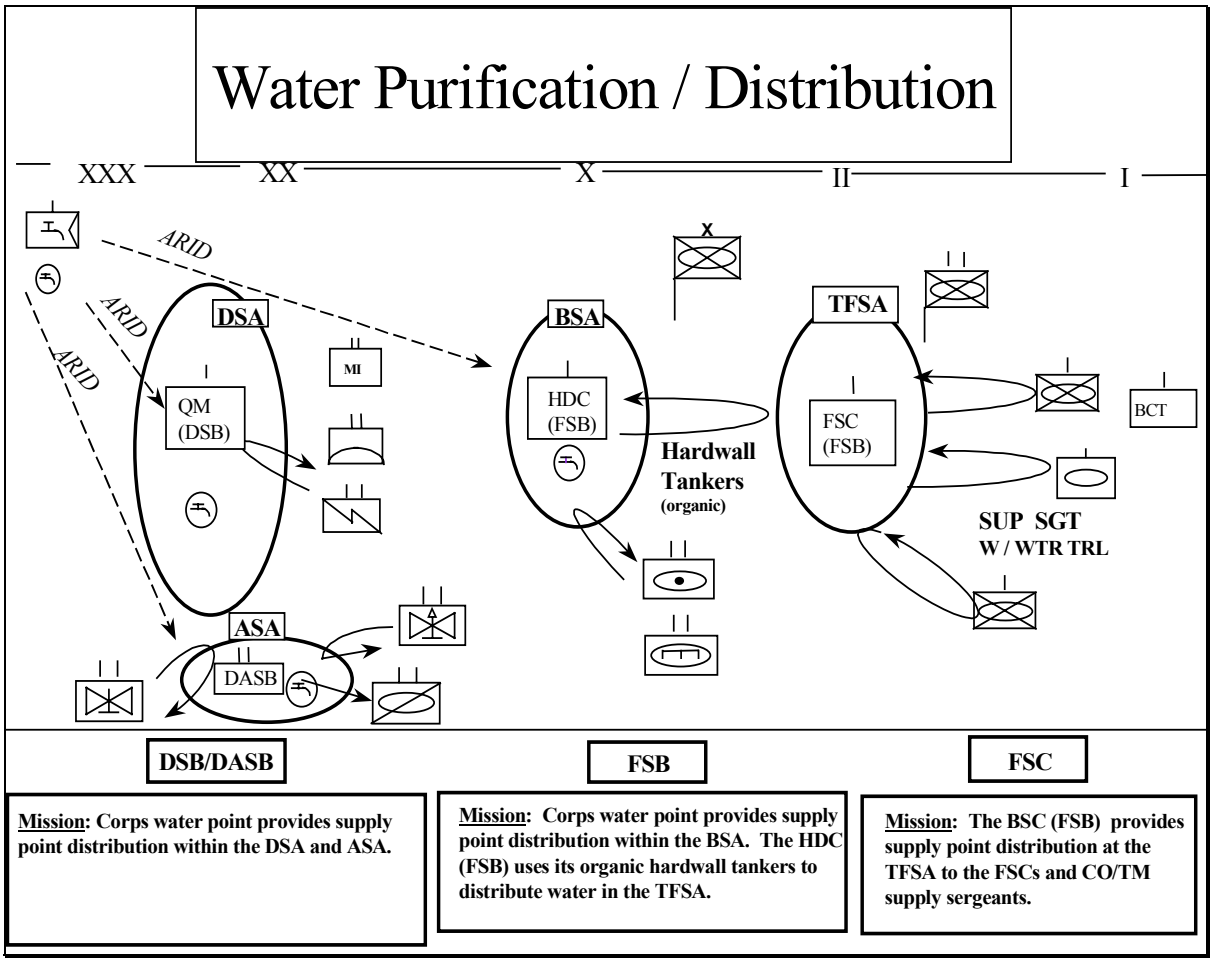

Figure 7-9. Water Purification/Distribution

CLASSES II, III(P), AND IV

7-90. Classes II, III(P), and IV and unclassified maps include a wide variety of supplies and equipment from clothing to tools, to packaged petroleum products, to barrier materials. The FSC of the FSB issues Class II, III(P), and IV to units in the maneuver BN/TF. The HDC of the FSB will maintain limited stockage for support of the brigade supply point distribution to brigade troops. The QM company out of the DSB will issue Class II, III(P), and IV to division troops. Stockage for the support of division troops is kept in the supply platoon of the QM company. This stockage is not based on maneuver brigade consumption. The HSC of the DASB will maintain stockage for support of the AB and division cavalry squadron.

7-91. Unclassified maps follow the same requisition flow as Classes II, III(P), and IV supplies. They are stored in the receipt, storage, and issue section. Maps are issued through supply point

distribution to supported units according to established tables of allowances or to fill special requirements. Classified maps are handled through S2 channels.

7-92. Units in the brigade area submit their requests for Class II, III(P), and IV items through the appropriate STAMIS (ULLS-S4), to their supporting FSC. The supply and transportation (S&T) platoon issues the item to the customer. If supplies are not on hand at the FSC, the request is sent to division support operations (SARSS-2A). Personnel in the Class II, III(P), and IV supply branch of division support operations check within SARSS-2A. If they find the items are on hand in the SSAs, they will release it or forward the request to the corps SARSS-2A. The division support operations can also direct cross leveling of items within FSBs. The supporting COSCOM activity delivers the supplies to the respective SSA according to the department of defense activity address code (DODAAC). Units in the division rear submit their Class II, III(P), and IV request through the appropriate STAMIS (ULLS S4) to their supporting QM company in the DSB. Units in the aviation brigade and division cavalry squadron submit their Class II, III(P), and IV request through the appropriate STAMIS (ULLS S-4) to their supporting HSC in the DASB. Figure 7-10 shows the DISCOM supply operations for Class II, III(P), and IV as well as Class VII and IX supply operation, and Figure 7-11 shows the requisition flow for Classes II, III(P), and IV.

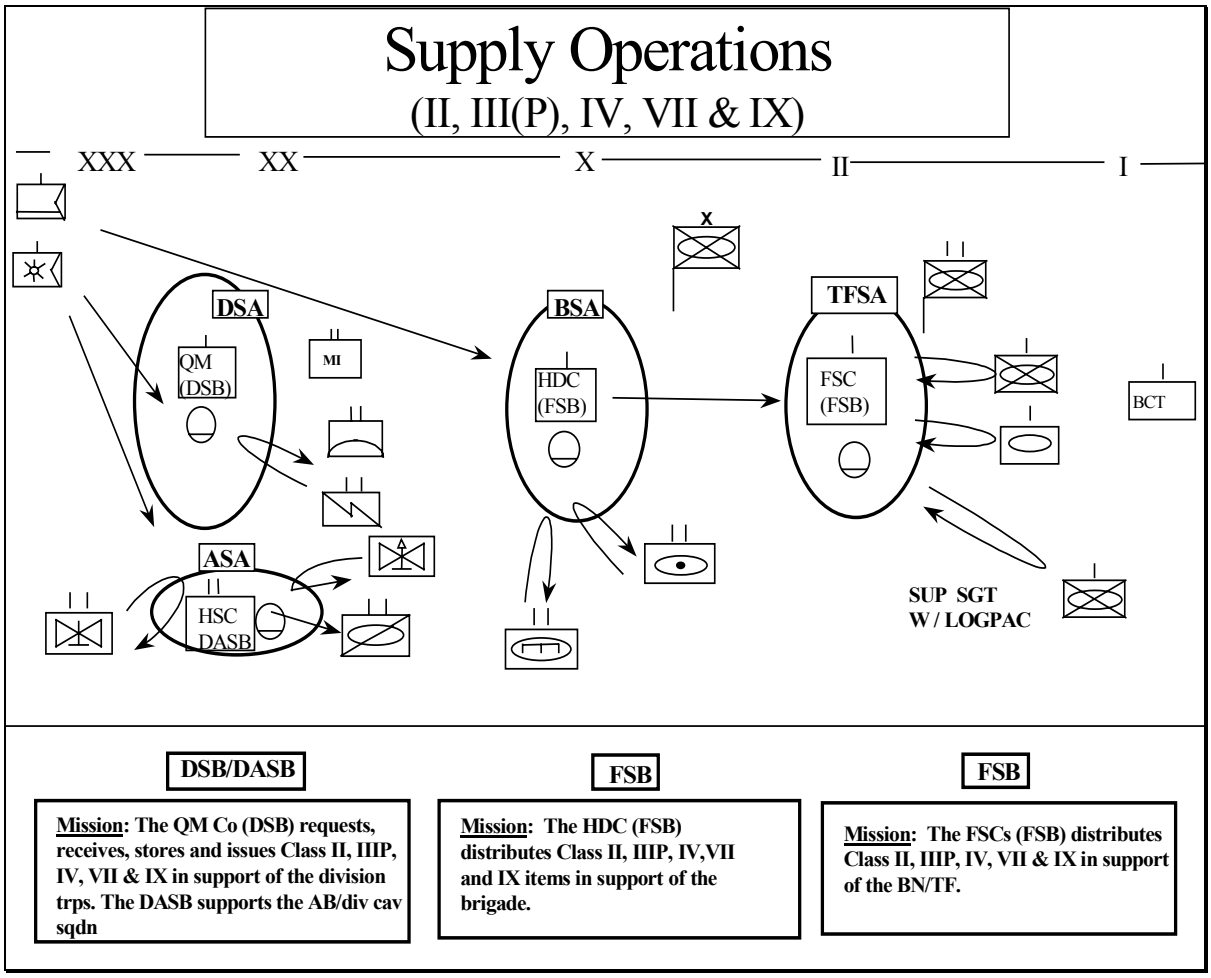

Figure 7-10. Classes II, III(P), IV, VII, IX Resupply

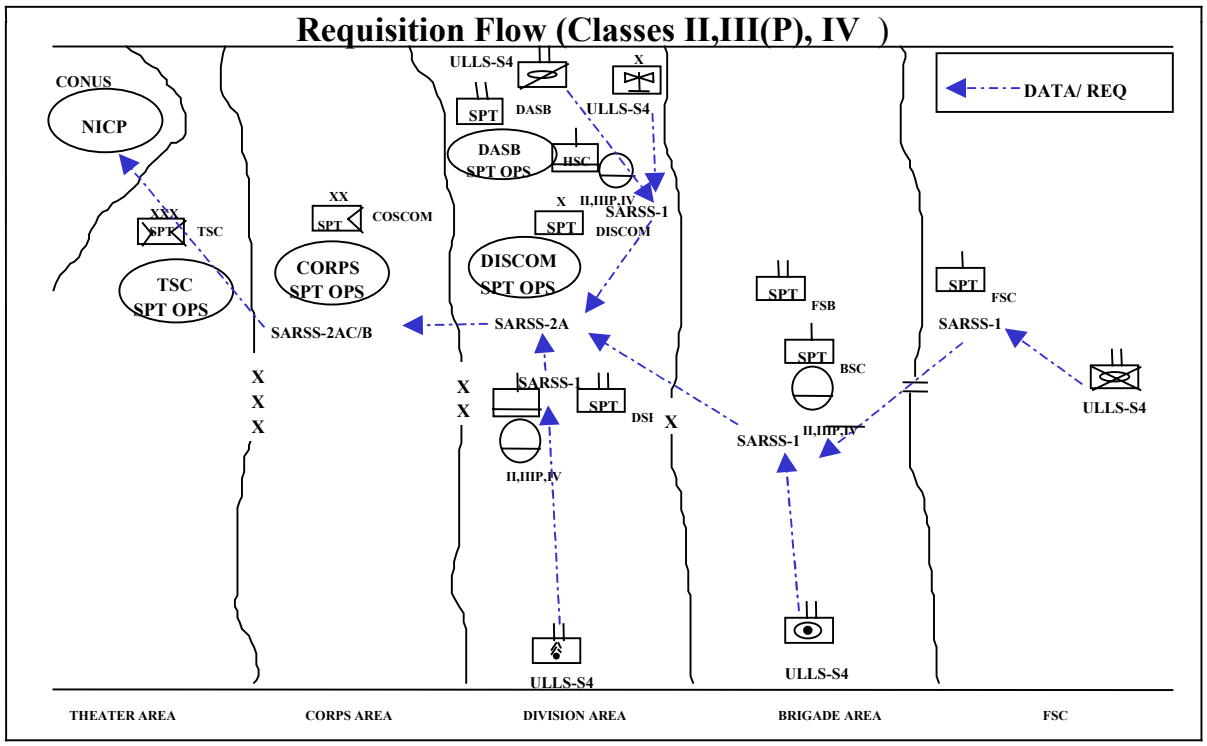

Figure 7-11. Requisition Flow for Classes II, III(P), IV

7-93. The limited stockage of Class II items may include MOPP gear, environmental protection items (boots, overshoes, parkas, and helmets), and mechanics' tools. Distribution plans for protective clothing and equipment must consider the threat and the service life of protective overgarments and filters. Unit priorities for issue must be established.

7-94. The QM company in the DSB, the HSC in the DASB, and the HDC in the FSB or, if appropriate, the gaining unit's supply element, re-equip soldiers returning to duty from medical treatment facilities (MTFs) in the division rear area. The FSB/DASB may re-equip return to duties (RTDs) in the brigade area. If the gaining unit has support elements operating in the vicinity of the MTF, SOP may require that the unit bring personal equipment when it picks up personnel returning to duty. If the gaining unit does not have elements operating near the MTF, SOP may require medical personnel to pick up clothing and essential protective gear at the supply point to provide minimum protection before the soldier returns to duty. The MTF cannot issue individual weapons.

CLASS VI

7-95. Class VI supplies are those items used for personal hygiene, comfort, and welfare. They include such things as candy, gum, dental care products, soap, and stationery. Initially the soldier carries these personal items with him. As the supply system

adjusts to demand, resupply is by HCP where personal demand items are issued gratuitously. HCP, as already mentioned, are issued with Class I items. When the situation permits, tactical field exchanges provide services to specified units to troop concentrations.

CLASS VII

7-96. Class VII items are intensively managed and are normally command controlled. Class VII replacement is based on combat losses reported through command channels to the division G3 and G4 via MCS and CSSCS. This permits the commander to remain apprised of the operational status of subordinate commands and to direct the distribution of items to those units having the most critical need. Weapon systems such as tanks are intensively managed by weapon system replacement operations (WSRO). If the item is a WSRO weapon system, the primary linkup points of the item with its crew may occur in the DSA/ASA/BSA or in designated assembly areas.

7-97. Class VII requests will be accomplished by using the FBCB2 to submit combat loss reports from company level to the BN/TF S4. The CO/TM rollups will be consolidated by the BN/TF S4 and submitted to the brigade S4, with an information copy provided to the FSC support operations. The brigade S4 will consolidate and submit battalion combat loss reports to the division support operations via CSSCS, with information copies provided to the division G4 and FSB support operations. The Class VII/PBO representative from the division support operations will enter the requests into the appropriate STAMIS (SPBS-R to SARSS-1). The DSB support operations will consolidate and submit division troops battle loss reports for Class VII to the division support operations, with a copy provided to the G4. The DASB support operations will consolidate and submit aviation brigade and division cavalry squadron requests for Class VII to the division support operations, with a copy provided to the G4.

7-98. A predetermined amount of Class VII may be maintained and issued to division organizations upon division support operations approval, based on guidance from the division G4. Upon corps approval of division support operations Class VII requisitions, corps support command (COSCOM) units transport Class VII equipment to the supporting SSA (QM CO, HSC, HDC, or FSC) or directly to the requesting unit when possible. Class VII supply operations is shown in Figure 7-10.

CLASS VIII

7-99. Class VIII management in the Army's Force XXI division is accomplished by medical units/elements through the use of a functional business system called medical logistics-division (MEDLOG-D). Currently the functional business system for Class VIII wholesale/retail management at echelons above division (EAD)

is the theater army medical management information system (TAMMIS) which is a legacy system. This system will be replaced in the future by the defense medical logistics standard support (DMLSS) System. MEDLOG-D is a module of DMLSS and is scheduled for fielding to division and corps medical units/elements. This system provides division and corps medical units/elements a direct link with the supporting MEDLOG battalion's units. The health service materiel officer (HSMO) of the division surgeon's section (DSS) and the DISCOM medical materiel management branch (MMMB) in the division support operations section, coordinates Class VIII resupply for division medical units/elements. Each medical unit maintains its own basic load of 3 days of medical supplies. The MEDLOG battalion assigns one MEDLOG company in direct support of each division. Once established, it provides Class VIII resupply for the division and corps medical elements operating in the division AO.

7-100. During deployment, lodgment, and early buildup phases, medical units operate from planned, prescribed loads and from existing pre-positioned war reserve stockpiles identified in applicable contingency plans.

7-101. During the initial employment phase, each FSMC will receive a preconfigured medical resupply push-package every 48 hours from pre-positioned stock or the continental United States (CONUS) base. Preconfigured medical resupply push-packages will continue until appropriate units of the corps MEDLOG battalion are established.

7-102. Initial resupply efforts may consist of preconfigured medical supply packages tailored to meet specific mission requirements. Preconfigured push-packages will normally be shipped directly to the division support medical company (DSMC) and FSMCs until replenishment line item requisitioning is established with the supporting MEDLOG company. During this time, medical company treatment and ambulance teams deployed with maneuver or other division elements are re-supplied from their medical company. Maneuver battalion medical platoons/battalion aid stations (BASs) will receive standard push-packages every 12-24 hours. Contents of push-packages can be adjusted as the battle changes. Line item requisitioning will be by exception only during this time. While resupply by preconfigured packages is intended to provide support during the initial phase, continuation on an exception basis may be dictated by operational needs. Planning for such a contingency must be directly coordinated with the DSS. Other than line item requisitioning from the FSMCs and DSMC, the HSMO of the DSS and the DISCOM MMMB will coordinate all Class VIII requirements for the division with the supporting MEDLOG battalion and/or MEDLOG company as appropriate.

7-103. Divisional medical elements use MEDLOG-D, a software application of the MC4 system, to requisition Class VIII. Users of this system in the division include maneuver battalion medical

platoons, FSMCs, the DSMC, and the DISCOM MMMB. The MEDLOG-D system is the primary source for Class VIII line item requisitions from the FSMCs and DSMC. Forward support medical companies and the DSMC request Class VIII resupply from the supporting MEDLOG company.

Routine Requisitions

7-104. Maneuver battalion medical platoons submit routine request for Class VIII resupply, using MEDLOG-D, to their supporting FSMC via a digital request. An information copy of all requisitions within the brigade will be forwarded by the FSMC to the DISCOM MMMB and the brigade surgeon's section (BSS). Routine requisitions submitted by FSMCs, division or corps medical elements operating in the BSAs are forwarded directly to the supporting MEDLOG company. An information copy goes to the DISCOM MMMB. The MMMB coordinates shortfalls in throughput distribution with the DSS and divisions support operations branch. The MMMB may update priorities with the MEDLOG company to correct deficiencies in the delivery system. If the requested items are available for issue, a materiel release order is printed and the requested supplies are prepared for shipment. For items not available for issue, the requests are passed to the MEDLOG battalion's logistics support company. Using TAMMIS, the MEDLOG company forwards information to the unit on items shipped and on those requests which were not filled. An information copy is forwarded to the MMMB.

Immediate Requisitions

7-105. Immediate requisitions from maneuver battalion medical platoons are submitted to the supporting FSMC. When the supporting FSMC is unable to fill the request, the requisition is forwarded to the DISCOM MMMB. The DISCOM MMMB will expedite handling of this request to ensure tracking of critical Class VIII items and timely delivery. Cross-leveling in the division may be accomplished if it is the most expedient method of obtaining and shipping required items to the requesting unit/element. If the DISCOM MMMB is unable to locate requested item(s) in the division, the request is forwarded to the supporting MEDLOG company. Immediate requisitions from FSMCs are sent through the DISCOM MMMB for management and to ensure visibility of the requisitions. The DISCOM MMMB maintains a record of the requisition until it is filled. All immediate requests received by the MEDLOG company are processed for shipment by the most expedient transportation available. The MEDLOG company forwards all immediate requests not filled, to the MEDLOG battalion's logistics support company located in the corps rear. The DISCOM MMMB has the responsibility of monitoring all immediate requisitions not filled by the MEDLOG company. The DISCOM MMMB reports all immediate Class VIII requests to the DSS/CHS cell.

Delivery of Class VIII

7-106. Delivery of throughput Class VIII to the requesting medical units in the division is accomplished by logistical packages (LOGPACs) and nonmedical transports. Shipment of these Class VIII LOGPACs from the MEDLOG company is coordinated with the corps support battalion and the corps movement control officer (MCO). The management and in-transit visibility of Class VIII delivery is accomplished through document number and transportation number tracking. The systems that work together to provide this management and coordination are TAMMIS, transportation coordinator's automates information for movement system (TC-AIMS), MTS, and global traffic network (GTN). These systems are located in the MEDLOG company and the DISCOM MMMB. In some cases, delivery of medical materiel into the division AO may also be achieved through use of the directed Class VIII resupply using medical evacuation resources that are returning to the division medical units. From the FSMCs, delivery of Class VIII to maneuver battalion medical platoons via LOGPAC or nonmedical transports is coordinated by the FSMC with the FSB support operations section. For directed Class VIII resupply, medical transports may be used. Immediate Class VIII resupply will be processed for shipment by the most expedient means available. Based on casualty estimates, medical push-packages may be pre-positioned with maneuver battalion medical platoons or with the FSMC. Figure 7-12 provides an overview of Class VIII requisitions and resupply flow at echelon I. Figure 7-13 provides an overview of Class VIII requisitions and resupply flow at echelon II.

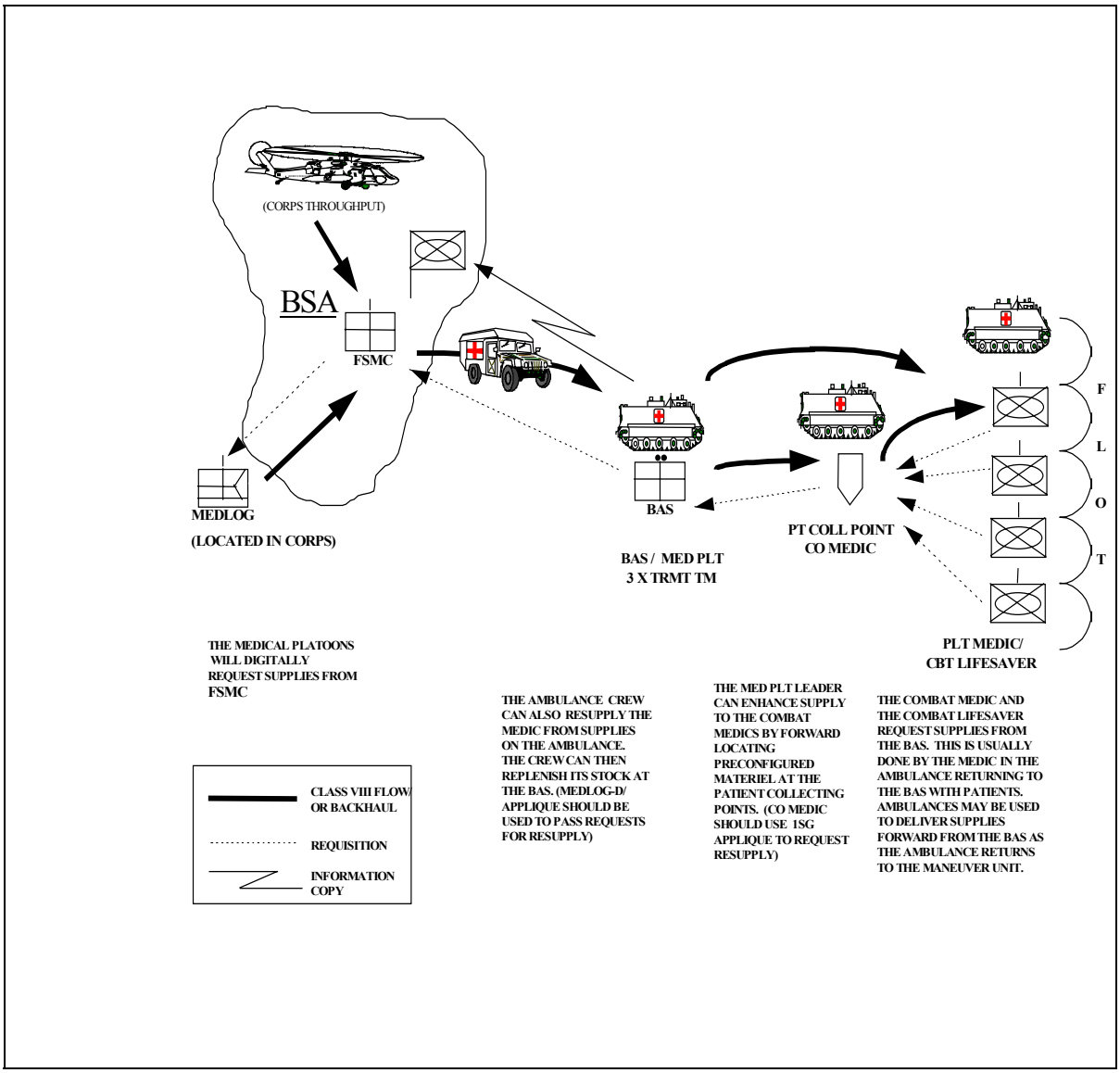

Figure 7-12. Overview of Class VIII resupply at Echelon I

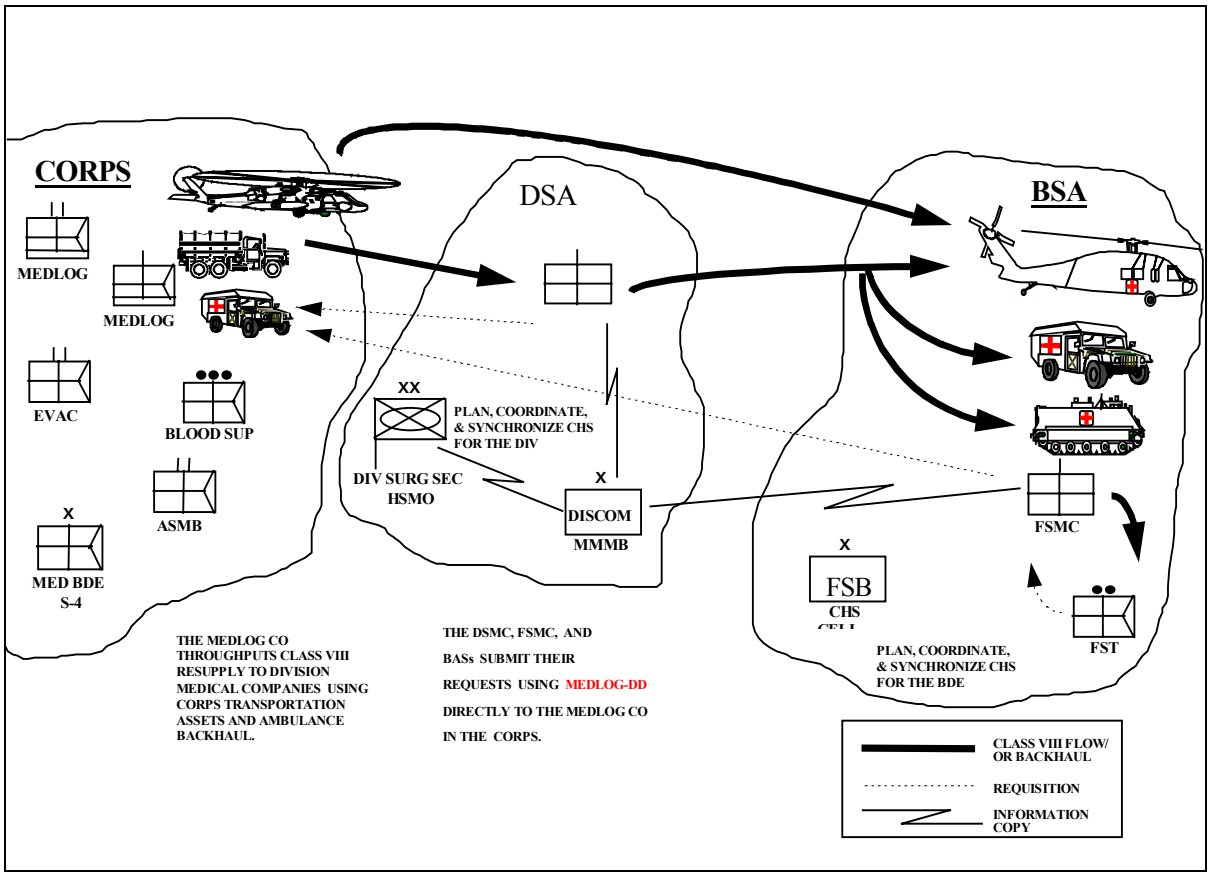

Figure 7-13. Overview of Class VIII resupply at Echelon II

Assemblage Management Reporting Under USR

7-107. Unit status reporting (USR) of medical equipment sets (MESs) in the division will be created using the MEDLOG-D USR feeder report. This is not a classified report. It calculates percent fill of sets according to AR 220-1 and AR 40-61 and does not create a roll-up of equipment on hand calculations. Minus the potency or dated items while units are not deployed, 70 percent fill of the combined expendable, durable, and non-expendable items within a set constitute an on-hand set for accountability purposes. Medical equipment must be maintained at an acceptable degree of readiness above 70 percent as determined by the division surgeon and unit commander.

7-108. Division medical units/elements will prepare a requisition plan to immediately replenish all potency, dated, and other items that are not being maintained and missing items from sets. Units will coordinate with the supporting MEDLOG company prior to implementation of the plan.

7-109. Transmission of Class VIII requisitions and status reports data will be accomplished by one of a number of ways. The baseline method will always be by disk and hard copy. The

preferred method will be by radio or MSE transmission if signal capabilities allow. At the battalion level, units will attempt to transmit requisition and report data using SINCGARS systems improvement program (SIP) or enhanced position location reporting system (EPLRS) linked to the hyperlink or modem capability of MEDLOG-D. Given the line of site limitations of FM radio, this attempt is best accomplished in synchronization with previously coordinated retransmission. Within the BSA and higher, transmission of data will be by either MSE or amplitude modulation (AM) radio if allowed. Note that if MSE is used, the unit must accomplish prior coordination with the division G-6 to obtain a net encryption system or other encryption hardware system in order to send data.

Medical Equipment Maintenance

7-110. The medical equipment repairer provides operational and unit-level medical equipment maintenance for the FSMC and the DSMC. He exercises his responsibilities by:

- Scheduling and performing PMCS.
- Performing electrical safety inspections and tests.
- Accomplishing calibration, verification, and certification services.
- Performing unscheduled maintenance functions with emphasis upon the replacement of assemblies, modules, and printed circuit boards.
- Operating a medical equipment repair parts program, to include Class VIII as well as other commodity class parts.
- Maintaining a technical library of operator and maintenance TMs and/or associated manufacturers' manuals (printed and/or digital).
- Conducting inspections for new or transferred equipment.
- Maintaining documentation of maintenance functions according to the provisions of Technical Bulletin (TB) 38-750-2 or DA standard automated system.
- Collecting and reporting data for readiness reportable medical equipment in accordance with AR 700-138.
- Requesting through the DISCOM, MMMB for maintenance support services, repairable exchange, or replacement from the medical standby equipment program (MEDSTEP), see AR 40-61.

7-111. Mandatory parts lists (MPLs) and prescribed load lists (PLLs) need to be monitored routinely. An MPL to support medical equipment is published annually in the SB 8-75 series. Most medical equipment repair parts can be requisitioned through the Class VIII system; however, some repair parts are needed to repair medical equipment that fall in the category of Class IX repair parts

(that is, common fasteners, electrical components, and others). Requisitions for Class IX repair parts are sent through the organization's supporting motor pool and require stringent monitoring and follow-up efforts. Special considerations for medical repair parts are explained in AR 40-61.

Division Blood Management

7-112. Blood requirements for the division are determined by the division surgeon. Only packed liquid red blood cells are expected to be available to the division. Blood products are shipped to Army MTFs in the division by the blood support detachment of the MEDLOG battalion. The DSS (HSMO) coordinates with the blood support detachment for division blood requirements. Shipment of blood from the corps to the division is coordinated by the blood support detachment with the CMCC. It is then transported to the requesting MTF by dedicated medical vehicles (air and ground). The blood support detachment notifies the DISCOM MMMB when blood is shipped. Immediate resupply can be accomplished by air ambulances from the medical battalion, evacuation or by medical personnel on nonstandard medical transports.

7-113. Blood support is a combination of four systems (medical, technical, operational, and logistical). Blood support must be considered separate from laboratory support. In the long term, theater blood management is based on resupply from the CONUS donor bases (armed services whole blood processing laboratories [ASWBPLs]). At the corps level, storage and transportation refrigerators allow the blood support detachment to provide blood as far forward as the FSMCs of the division. See FMs 8-10, 8-10-9, 8-55, and TM 8-227-12 for definitive information on blood management. Also see Technical Manual 8-227-12, Armed Services Blood Program Joint Blood Program Handbook, January 1998.

Medical Support To The DASB

7-114. The DASB has no organic medical support. The DSB DSMC supports those DASB and other units in the division rear with a treatment team. Units operating in the forward areas may be supported by FSB, FSMC on an area basis. The division cavalry squadron and the division artillery units have organic level 1 medical personnel. For detailed information on the FSMCs see FM 63-20-1 (FSB), and FM 63-23-1 (DSB).

CLASS IX

7-115. Class IX and PLL/combat spares for the CO/TM are received, stored, and issued by the Class IX element of the MCS, FSC. An operator identifies a fault and requests assistance from the CRT via FBCB2. The CRT will diagnose the fault and identify the required Class IX supplies. The DSU supporting the brigade troops is the brigade support company. The ASL/combat spares

for the brigade are maintained by the Class IX section in the HDC. The PLL for the HDC of the FSB, FSMC of the FSB, HHC brigade, engineer battalion, and the brigade cavalry troop may be managed by the MCS of the brigade support company. The Class IX supply section of the QM company, DSB, provides direct support to division troops. This section receives, stores, and issues Class IX (ground and missile) supplies. The section also maintains the division troop's ASL, and operates the reparable exchange service. The Class IX supply section of the HSC, DASB provides direct support to AB units and the division cavalry squadron. The section also maintains the aviation brigade/division cavalry's ground ASL, and operates the reparable exchange for ground equipment.

Class IX Requests

7-116. An operator identifies a fault, annotates the fault and notifies the CRT. The CRT will diagnose the fault, identify the repair part required, forward the request to the maintenance control section (MCS)of the FSC, the MCS will either issue the part if it is on hand or it will pass the requisition on to the Class IX section supply platoon of the HDC via ULLS-G or SAMS, and if the part is on hand in the Class IX section of the HDC it is released. If the requested repair part is not on hand, the Class IX section will process the requests via SARSS-1 and forwards to the DMMC SARSS-2AD. The FSB's HDC maintains the brigade's ASL. The MCS in the BSC and the FSCs maintain the brigade's combat spares. The supply platoon, HDC will process the ULLS-G and SAMS class IX requisitions via SARSS-1 for brigade troops and the MCSs. The QM company of the DSB will process the ULLS-G and SAMS class IX requisitions via SARSS-1 for division troops. The HSC of the DASB will process the ULLS-G request data via SARSS-1 for the aviation brigade and division cavalry squadron. Figure 7-14 shows the requisition flow of Class IX within the division.

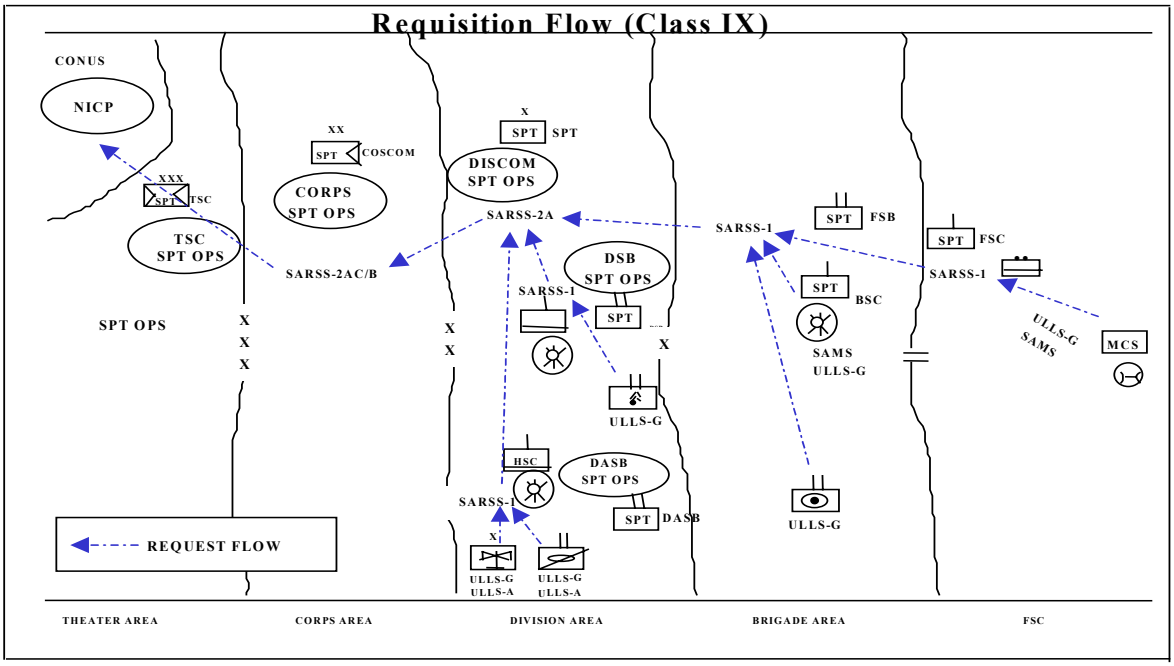

Figure 7-14. Requisition Flow for Class IX

Class IX Resupply

7-117. Upon receipt of a requisition, the DISCOM/COSCOM SARSS-2A will conduct a subordinate search of all SSAs to locate the requested repair part. Once SARSS-2A identifies the location of the repair part, a MRO is processed to the lowest level SSA. The COSCOM's CSG units will throughput Class IX supplies to the QM company of the DSB, the HSC of the DASB, the S&T platoon of the HDC, and when possible the supply section of the FSC. The QM company and S&T platoon will conduct supply point distribution for division and brigade troops. The HSC of the DASB will conduct supply point distribution for AB and the division cavalry squadron. The S&T platoon of the HDC provides unit distribution to the FSC in support of the maneuver companies. COSCOM units will transport Class IX (A) supplies to the supply platoon of the AMC in the DASB. Class IX supply operations is shown in Figure 7-10.

FIELD SERVICES

7-118. Field services, such as showers, laundry and textile renovation, are provided by the corps field services companies. The unit makes requests for field services to the DSB, DASB, and FSB support operations section. The requesting support operations section will make the appropriate coordination with DISCOM.

7-119. Field service support requires close coordination with those within and outside the division. The division support operations, DSB support operations, FSB support operations, DASB support operations, and commanders of the S&S and field services companies of the corps are all involved in providing field services to the division.

MORTUARY AFFAIRS

7-120. All commanders are responsible for unit level search, recovery, and evacuation of remains to a MACP. A well-organized mortuary affairs program in the division helps to ensure the following:

- Prompt and effective recovery of all remains from the division area of responsibility.
- Prompt and accurate identification of the remains.
- Prompt recovery, inventory, and security of personal effects found on remains.
- Evacuation of remains, with their personal effects secured to them out of the division area to the corps MACP.
- Prompt, accurate, and complete administrative recording and reporting.
- Prompt and adequate care for deceased allied and threat personnel IAW current united nation (UN) agreements.
- Reverent handling of remains and adequate ceremonies and services for deceased.
- Emergency burials, when required.

7-121. Upon deployment and transition to the concurrent return program, a forward collection platoon will be detached from the corps mortuary affairs company and deployed forward sending a forward collection section to each of the three maneuver brigades and one to the DSA. The division commander has the flexibility, and based on METT-TC, may deploy the sections as the mission dictates. The MA collection sections each consists of one 92M30, one 92M20, and five 92M10. Unit MA responsibilities are detailed in Joint Pubublication 4-06, Joint Tactics, Techniques, and Procedures for Mortuary Affairs in Joint Operations.

7-122. This augmentation team receives and identifies remains and arranges for evacuation to a MACP. Deceased personnel are then evacuated from the division area to a MACP, temporary cemetery, or a mortuary in the corps area.

7-123. The division collection, identification, and evacuation section of the MA team operates the division collection point. The MA collection point is located a short distance from a MSR and near the medical supporting facilities. It is isolated from other support activities in the support area. It is the unit commander's responsibility to search, recover, and tentatively identify and to

evacuate the deceased personnel of the unit to the nearest MA support collection point. Digital FBCB2, or per the TSOP, will be used to transmit the initial findings of the unit search and recovery teams to the MA team. In IAW AR 600-1, JTTP 4-06, and AR 637-30, the unit is responsible for evacuating all deceased personnel from the company AO.

7-124. The MA teams in the brigade areas establish tentative identification procedures. They also initiate the required reports and records that will accompany deceased personnel. Evacuation request of remains from the unit will be transmitted through FBCB2, or per the TSOP, to the supporting support operations section. Support operations will coordinate for transportation. The DSB support operations will make the proper coordination for the evacuation of division troops remains. The DASB support operations will make the proper coordination for the evacuation of aviation brigade and division cavalry troop remains. All personal effects found on the remains will remain with the deceased when evacuated to the division collection point.

7-125. Emergency burials in the division area are resorted too only in extreme emergencies and when authorized by the theater commander. These burials are fully documented and promptly reported through MA channels.

7-126. Due to the possibility of heavy fatalities in a NBC attack, the use of regular MA burial methods may be impossible. In such cases, mass burials may be required to reduce the time between the recovery and the burial of the remains. Permission for mass burials comes from the joint mortuary office in the theater, with the approval from the theater commander.

7-127. Normally the MA officer of the organization requiring mass burials gets permission directly from the theater MA officer. If there are no MA units in the area, and contact with higher headquarters is lost, the senior officer in the area makes the decision to bury. These mass burials are to be performed IAW FM 10-64, Chapter 6. In an NBC situation, specific MA task groups may be formed. When provided with sufficient support, these groups have the means to either evacuate or perform mass burials of the deceased personnel. Joint Tactics, Techniques, and Procedures for Mortuary Affairs in Joint Operations, (JTTP 4-06) contains other related MA procedural guidance.

7-128. Temporary interment of remains in OCONUS is permitted as a last resort. Every effort should be made to return remains to CONUS as soon as possible. The geographic combatant commander may authorize temporary interments only when operational constraints prevent the evacuation of remains out of the AOR. The expedient and respectful evacuation of deceased personnel is a top priority. However, during extreme situations when the tactical and logistical situation leave no alternatives, a program of temporary interment may be implemented. Temporary

interments are a last resort used for health, safety, sanitation, and morale reasons at unit levels and are conducted IAW Joint Pub 4-06 and FM 10-64. These burials are fully documented and promptly reported through MA channels.

7-129. In extreme circumstances, when a unit is cut off and has no means to communicate with higher headquarters, the senior commander is responsible for deciding whether temporary interment will be utilized after all known support options have failed.

MANNING THE FORCE

7-130. Manning is the process of recording, reporting, verifying and processing personnel strength and casualty information at the unit level.

7-131. Proper and effective manning is essential to the operational success of any military mission. Manning the force involves the uninterrupted flow of soldiers from mobilization and deployment through redeployment and demobilization. The manning process includes the tasks of predicting personnel requirements, resourcing units with personnel assets in accordance with the commander's guidance, monitoring the personnel strength posture, assessing unit combat power, and adjusting personnel resources to provide the optimum combination of manpower and equipment to maximize combat power. Manning the force impacts force ratio evaluations and all logistical requirements. To optimize and sustain the commander's lethality, survivability, and high OPTEMPO requirements, the personnel operator must place the right soldier, at the right place and time with the right capabilities. This process combines anticipation, movement and skillful positioning of personnel assets. The Force XXI commander must integrate manning information with other combat power factors in a near real-time to execute combat operations successfully.

7-132. The S1 is the battle staff officer for the commander on all matters concerning human resources. Manning the force encompasses the tasks that current doctrine associates with personnel readiness management, replacement management, and casualty management. In information age operations the commander must also have digitized manning information integrated with other decision support data in order to execute combat operations successfully. Enabling Force XXI technologies include the tactical personnel system (TPS), personnel module of CSSCS, and FBCB2/PERSITREP. The lethality and digitization capabilities associated with the DISCOM and the 21st century battlefield require that manning be divided into discrete tasks. These tasks are iterative and do not follow a prescribed order or sequence. PSS organizations are provided the minimum assets necessary to conduct the tasks required at their echelon.

7-133. **Predicting** is the process of anticipating the number, grade, and skill of personnel resources required to sustain the battlefield

operating system (BOS) of the DISCOM, as they execute the operational patterns that destroy the enemy's will to fight. The S1 must complete a loss estimate based on threat and friendly force capabilities. This estimate provides planning parameters for replacements, medical facility/support requirements and MA assets. In the DISCOM, the personnel operator will use the digitized capabilities within CSSCS to anticipate casualties..

7-134. **Resourcing** is the process of bringing units to their required strength according to the commander's priorities. Although it occurs at every echelon of command, resourcing is the primary focus of the national provider. The department of the army deputy chief of staff for personnel (DA DCSPER) executes the task at the national level in order to structure, acquire, train, distribute, and separate the force. Individual replacements move from the central receiving center (CRC) under the direction of the DCSPER and CONUS major commands (MACOMs) to resource the force projection theater. At all levels, personnel operators provide commanders combat power visibility by properly identifying the status of available personnel resources. The S1 then recommends the allocation of available resources to meet current and future requirements. The DISCOM cannot resource itself and must be provided assets from division to accomplish this task.

7-135. The FXXI division and its units will be multi-compo units. Multi-compo units have both active (AC) (compo 1), and reserve (RC) (compo 2) [Army National Guard] and/or [United States Army Reserve] (compo 3) personnel and/or units as part of its MTOE. This is accomplished in one or more of the following manners:

- AC and RC soldiers assigned by paragraph and line number to the same unit.
- Units of one component missioned to support higher headquarters units of another component.

7-136. The three types of reservists assigned to the FXXI unit are:

- Members of troop program unit (TPU), traditional drilling reservist.
- Reserve associate support program (RASP), USAR soldiers recruited for a specific TPU, brought on active duty for two years, sent to initial and advanced individual training, attached to division for remainder of their two year active duty tour, than return to their USAR unit in TPU status.
- Active guard and reserve (AGR), USAR or ARNG soldiers on extended active duty.

7-137. **Monitoring** is the process of gathering unit strength data on a real time basis through digitized systems and communications. With digitization, we will eliminate the requirement for unique personnel reporting systems by having the capability to absorb personnel information from tactical communications. The task of digitized strength monitoring begins with establishing the strength

baseline. S1s, under the direction of the division G1, manifest all deploying personnel using MARC or (RAPIDS). Inbound or prepositioned asset information is available through information systems of the manning the force automation architecture. It is transmitted to personnel operators performing manning tasks at the strategic and/or operational level and provided to the division. The deployed database and personnel asset visibility establishes the strength baseline. The DISCOM S1 maintains unit status by getting updates through ABCS.

7-138. **Assessing** is the process of comparing current and projected unit strength data to personnel capabilities required, maintaining OPTEMPO and achieving operational success. It starts by determining the personnel required, maintaining BOS combat power IAW the commander's priorities and intent. The S1 matches current assets with projected losses and replacements and recommends the method to properly resource units.

7-139. **Adjusting** is the process of packaging, positioning and dispatching replacements to deliver them when and where needed. The G1 notifies the DMC of movement requirements as commanders direct the proper adjustment of personnel assets to accomplish pending missions. Personnel operators at division and EAD, in coordination with logisticians, match personnel and equipment during the adjustment process by providing unit, squad, crew, team, or individual replacements according to the commander's operational requirements and the needs of the BOS. Movement time and distance factors influence the positioning of personnel replacement units, which hold and process replacements until they are dispatched to the gaining unit. The division G1 does not have the resources to accomplish the adjustment task and may direct the dispatch of replacements directly from EAD to the gaining unit. In this case he synchronizes the adjustment task by sending teams from his operations cell to the EAD PSS unit where replacements are positioned as well as to the gaining units. If the commander desires to provide replacements indirectly to the gaining unit by holding them at the division level, the personnel group or personnel command must attach a replacement unit to the division. The G1 then uses his operations cell to directly manage the packaging, positioning, and dispatching of replacements.

7-140. When soldiers deploy to an area of operations, the battalion S1 manifests soldiers using smart card technology and tactical personnel system (TPS) to create the deployed database. Once the S1 establishes that baseline, unit leadership (FBCB2 platform level) report changes to the baseline through FBCB2s PERSITREP. As the S1 updates the duty status changes in the personnel module of CSSCS, all subsequent reports and queries reflect the changes. This reduces the need for the 1SG to send up reoccurring personnel status reports.

7-141. Upon receipt of a mission, the S1 completes a loss estimate based on the various courses of action proposed to the S3. When

the commander selects a course of action, the S1 completes a loss estimate using the appropriate casualty estimator, which resides on the personnel module of CSSCS. This prediction allows the S1 to requisition replacements to preposition on the battlefield as operations commence. The S1 can reinforce the main effort units using the prepositioned replacements.

7-142. Personnel service support is the management and execution of personnel services, chaplain activities, command information services, and legal service support. In the DISCOM, the S1 is responsible for coordinating and managing PSS. At the commander's discretion, the S1 may be delegated responsibility to serve as the organization public affairs officer. The S1 develops the administration SOP for the battalion. The S1 with the S4, prepares the administration and logistics portion of the battalion tactical SOP. S1 participates in the OPORD process and develops administrative annex materials. S1 ensures personnel service support is fully coordinated with other staff elements. S1 pays particular attention to the areas where close coordination is vital to the S1 section mission. These areas include MA, transportation, and health service support.

7-143. The S1 manages personnel services in the DISCOM. Personnel services, that include family and community support may also be provided by the installation directorate of personnel and community support at the division home station. Personnel services on the force projection battlefield provide postal operations; personnel information (records) management; morale, welfare, and recreation; and essential services including identification, awards, evaluations, promotions, transfers, discharges, reenlistment, leaves, line-of-duty investigations, and band operations. Other personnel services include voting and safety.